

"IN ANOTHER
MOMENT ALICE WAS
THROUGH THE GLASS,
AND HAD JUMPED
DOWN INTO THE
LOOKING-GLASS
ROOM."

L. Carroll
*Through the
Looking-Glass.*

CONTENTS:

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.

MANIFESTO.

MAP.

ANACHRONISMS
THROUGH THE BOTTOM
OF A GLASS.

FROM
APPEARANCE TO
APPARITION.

THE EDIT.

RUSH.

MULTIMEDIA:

HYPE OR REALITY?

CARTESIAN DIVIDE:

DE-BABLESER:

MEDIASPACE:

the interactive montage of information, text, sound, image, animation, digital video, possesses many of the seductive qualities of conventional mass media (t.v., cinema, radio, printed page, cartoon,) and promises to revolutionise the way people use and work with computers. through the likes of "sonic the hedgehog", cd-i, video on demand, tele-shopping, and the virtual museum, interactive multimedia seeps into our daily lives and shuffles cautiously around our peripheral vision, just within earshot. conventional media production, computing and traditional communication forms will wither in the bright light of these emerging technologies, unable to compete with this rich new wave of audio-visual consumption.

& yet the preoccupation is with bandwidths, megabytes and methodologies. we have a gleaming new technological pen, we have the hyper-linked ink, and yet we insist on reproducing our monosyllabic utterances, a cyclops with binoculars, cave painting with lasers, we lack the language, the thought process, to manipulate and articulate.

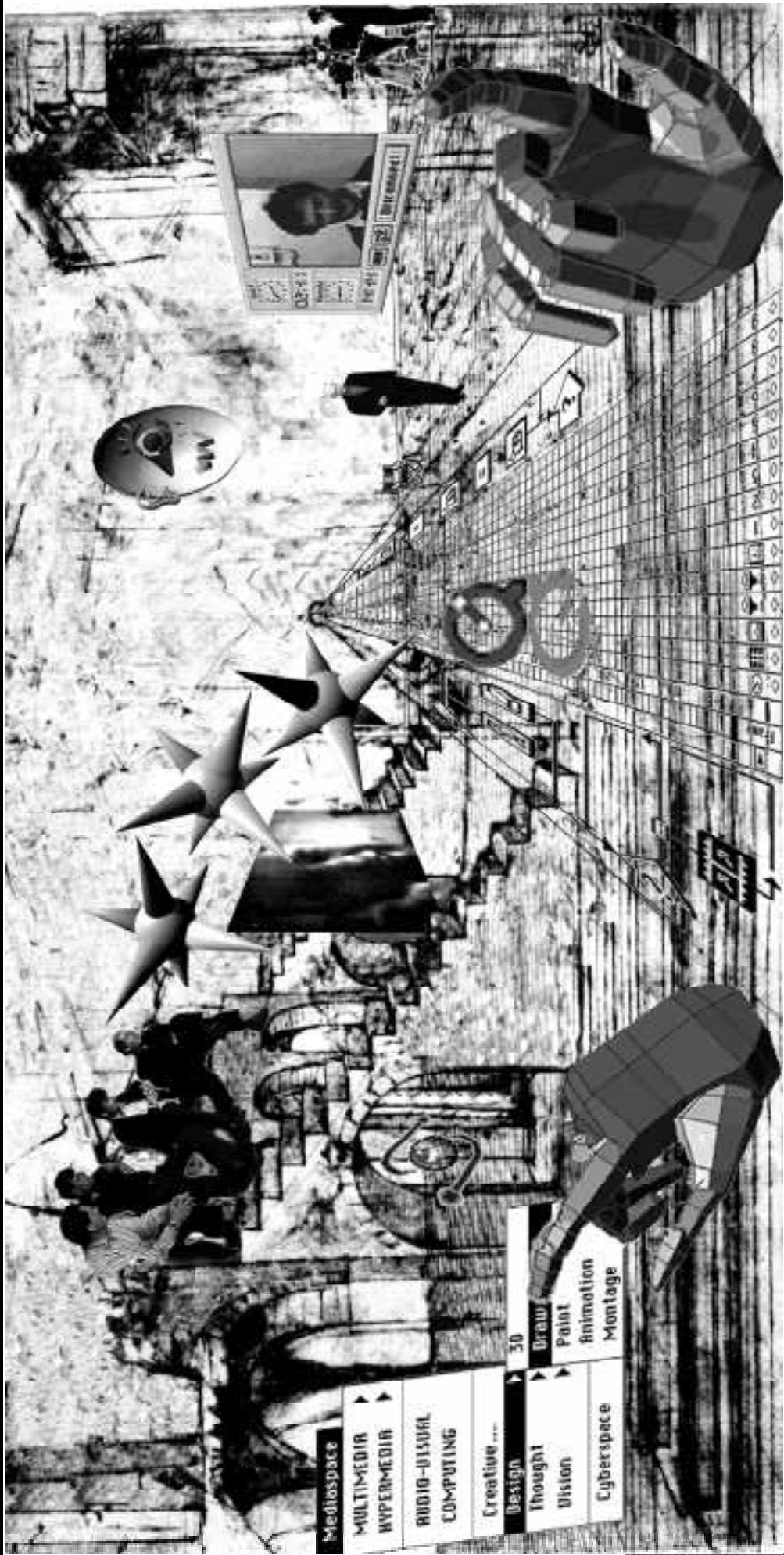
multimedia communication technologies do not simply present technical challenges, they create a range of new, conceptual, linguistic and philosophical problems requiring solutions that feed upon the expertise and experience of educators, media practitioners, creative designers, visual thinkers, hardware and software engineers, architects, mathematicians, etc... if anything multimedia has the potential to unite these traditionally separate cultures offering a vehicle for a new renaissance, a bridge across the cartesian divide.

information technology is becoming concerned more with sounds and visions than with bits and bytes. yet in order to harness this growing communications medium designers and producers need to be fluent in or at least be able to interpret and translate each others language, languages previously spoken by film/video makers, animators, typographers, designers, architects, programmers, electronics engineers...

is a forum where designers, producers and users of interactive audiovisual computer technology can speculate, present and exchange abstract ideas, designs and experiences. it aims to be a meeting place where disparate thinkers and makers can forge a new media form that inherits the strengths of the old and rises to meet the demands of the imminent.

INTELLECT
EDITORIAL OFFICE
PUBLISHING DEPARTMENT
EFAE
UNIVERSITY OF PLYMOUTH
EARL RICHARDS RD NORTH
EXETER
EX2 6AS
TEL/FAX: (0392 47) 5110

MAPPING THE TERRITORY



MEDIASPACE 1/94

FOR:

DESIGNERS, PRODUCERS
AND USERS OF
INTERACTIVE MULTIMEDIA
& TELEMATICS.

INTERACTIVE:

AUTHORING, SCRIPTING,
HUMAN COMPUTER
INTERACTION, ARTIFICIAL
INTELLIGENCE

EDUCATION:

COURSEWARE
DEVELOPMENT,
COMPUTER AIDED
LEARNING,
EDUTAINMENT/
INFOTAINMENT,
GAMING,

DESIGN:

METHODOLOGY AND
APPLICATIONS,
INTERFACE, METAPHOR
AND NAVIGATION.
DIGITAL IMAGING,
ANIMATION, VIDEO,
CAD,
VIRTUAL ENVIRONMENTS
AND VIRTUALITY.

COMMUNICATIONS:

TELEMATICS,
NETWORKED AND
BROADCAST,
THE NET.

Call for papers:

Articles/Images/
Diagrams/Ideas/
Concepts/Proposals.

To:-

Mike Phillips.
School of
Computing,
University of
Plymouth,
Drake Circus,
Plymouth PL4 8AA.

Fax::

0752 232540.

Email:

mikep@uk.ac.soc.plym

ANACHRONISMS THROUGH THE BOTTOM OF A GLASS.

Andy Finney



The traveller slapped the package down on the table in front of me and said "I hear you're interested in new ideas. You should see this."

I was currently more interested in finishing my beer.

"It's called a book. The idea is that it replaces those old bundles of parchments and scrolls. You can pack much more into a book, it doesn't blow away in the wind and it doesn't roll off the table."

I carefully put down my glass and unwrapped the package and took out this book. It weighed a couple of pounds, was about a foot across and an inch and a half thick. What I took to be the top and bottom surfaces were made of card and so was one of the edges. I looked at it. It did nothing in return.

"You have to open it. Put it on the table and fold back the front. That's how you get inside."

I put it down and folded back the front flap but the traveller looked annoyed.

"You've opened it the wrong way. That's the back."

I pointed out that I, like most people, was right handed. That means my natural movement is to pull with my right hand from left to right. If that is the wrong way to access this book then I thought there was room for improvement.

"Okay then pedant" said the traveller, "open it from the other side and you will be at the beginning".

So I opened the other end. It still didn't feel right but it was apparently the correct way to do it because the traveller smiled and pointed to the gold embossed cherub who came into view on the inner surface.

"See", he said, "It's got cherubs. It's approved by the Proper Church. You can't market anything these days unless it follows the PC standard."

It had cherubs. It had lovely gold embossed cherubs, beautifully coloured designs around the edges and there were lots of curly patterns too. Now my disadvantage here is that I can't read. I can recognise a good cherub when I see one but I can't read. Not much call for reading in these parts.

"Well, yes" the traveller admitted. "Not being able to read is a bit of a problem. Actually the book is written in Latin, for compatibility, and you and I speak English ... most of the time ... but this is rather a specialised market we're talking about here."

So I asked him how popular he thought these books would be.

"It's an agreed standard with black writing ... and gold cherubs ... on white paper. The Chinese did it first ... but they have dragons not cherubs. The Germans are backing the standard, although their letters are more fussy and complicated. Now we've adopted it. Caxton's in London are backing it so that's three major territories. You'll soon be able to read the bible in your own home."

Now my major problem with all this book stuff is finding time to do something new, never mind buying the book and learning how to use it. Life is too full already what with work and eating and sleeping. Don't people just want to go to church and hear the priest reciting the bible rather than have to do it themselves, what with all that searching through chapters?

"No, no. We'll soon get used to finding the information through the book rather than just sitting back and letting someone else tell us. Otherwise we just become a nation of pew potatoes. Mark my words ... books will catch on eventually. I reckon before long there will be a book in every village in the land."

I decided to leave him to it. My beer was finished and he showed no sign of buying me another so I wandered towards the door, practicing a casual look of withering scepticism over my shoulder.

"But it's got cherubs" he said ... cut off by the closing door. I made a mental note to go to confession tomorrow. All this new fangled hardware is perilous for the immortal soul.

ANDY FINNEY:
BROADCAST AND MULTIMEDIA
PRODUCER AND CONSULTANT
TECHNICAL MANAGER AND
SENIOR PRODUCER FOR THE
MULTIMEDIA CORPORATION.



FROM APPEARANCE TO APPARITION: DARK FIBRE, BOXED CATS AND BIOCONTROLLERS

Roy Ascott

"The mod does two things ... it stops me collapsing the wave function; it disables the parts of the brain that normally do so. But the mod also allows me to manipulate the eigenstates - now that I no longer clumsily, randomly, destroy all but one of them".

"So what should we call it?"

"... neural linear decomposition of the state vector, followed by phase shifting and preferential reinforcement of eigenstates". She laughs. "You're right: we'd better think of something catchier, or the whole thing will end up being grossly misreported".

Greg Egan, Quarantine, 1992

Schrodinger's Cat has to be the most celebrated creature in the bestiary of science, and the paradox it proposes is perhaps the most complex in our understanding of consciousness and reality. It describes the problem of measurement at the quantum level of reality, the level of subatomic particles, atoms and molecules. This gruesome thought experiment involves a black box containing a cat and radioactive material positioned so as to trigger the cat's death if the particle decays. The process is quantum mechanical and so the decay can only be predicted in a probabilistic sense. The whole boxed system is described by a wavefunction which involves a combination of the two possible states that the cat can be in; according to quantum theory the cat is both dead and alive, until we observe or measure it, at which point the wavefunction collapses and the cat will be seen to be in either one state or the other. And just as the electron is neither a wave nor a particle until a measurement is made on it, so the cat is neither dead nor alive until we get to take a look at it. We are dealing here with observer-created reality. To look is to have the system jump from a both/and situation to an either/or outcome, the quantum jump producing what is known as the eigenstate. But there is no agreement amongst physicists about precisely where, in the chain of events in this wavefunction collapse, the measurement result is ultimately registered.

Greg Egan places the point of collapse, the point at which reality is created, right in the brain. By proposing a technology which could be inserted in the brain to modify this eigenstate effect, to block it and thereby prevent the collapse of the wavefunction, his scenario gives a post-biological context to the idea that reality is constructed. Egan speaks the language of the coming decade. His 1990's science fiction addresses issues of the neuro-cognitive sciences with the prescience that William Gibson showed towards computer communication developments in the 1980s. And just as Gibson's Neuromancer correctly identified cyberspace as an important cultural construct of the late 20th century, so Egan's Quarantine identifies the issues likely to preoccupy us the turn of the millennium. The question of consciousness, the technology of consciousness, the transcendence of consciousness will be the themes of 21st century life. Fundamental to this evolution is the development of a telematic art in the cybersphere, and fundamental to that art are the experiments, concepts, dreams and audacity of artists working today with telecommunications systems and services.

Questions of consciousness and the construction of reality are at the centre of any discussion of the status, role and potential of art in the emerging cyberculture. The fundamental question is this: Can an art which is concerned, as western art has always been with appearance, with the look of things, with surface reality, have any relevance in our systems-based culture in which apparition, emergence, transformation are seminal? Can Representation co-exist with Constructivism? It is the overarching concern with appearance and with representation which has hitherto characterised western art and which has made it the servant of ideologies, of both church and state. It is its concern with appearance which has kept it in line with classical science, looking no further into things than their outward forms allow, making of the world a clockwork machine of parts whose movements are regulated by rigid determinism, and seeing Man as little more than a material object. It is the art of appearance which is purveyed in boutiques, galleries, museums and on the pages of chic

art magazines. It is International Art. And it is dying. It is dying because it is no longer relevant to a culture which is progressively concerned with the complexity of relationships and subtlety of systems, with the invisible and immaterial, the evolutive and the evanescent, in short, with apparition. Questions of representation no longer interest us. We find no value in representation, just as we find no value in political ideologies. We do not wish to keep up appearances.

The telecommunications of cyberspace, on the other hand, offer the contemporary artist the means of interaction (both his own and that of the viewing subject) with dynamic systems, with creativity-in-process, with the emergent properties of an art of transformation, growth and change. It is for this reason also that the narratives and technology of Artificial Life are so important to us at this time. Cyberspace is the space of apparition, in which the virtual and real not only co-exist, but co-evolve in a cultural complexity. Apparition implies action just as Appearance implies inertia. Apparition is about the coming-into-being of new identity, which is often at first, unexpected, surprising, disturbing. If appearance is claimed as the face of reality, of things-as-they-are, apparition is the emergence of things-as-they-could-be. However, our insight into the ways in which reality is constructed in our consciousness, leaves us in no doubt that the processes of apparition are authentic and that appearance is a fraud. Representation in art was always essentially mendacious, illusory, and counterfeit. The mirror always lies.

More and more artists now take global networks, virtual reality, high speed computing for granted. These technologies are no longer seen as simply tools for art, they now constitute the very environment within which art is developing. Given this increasing familiarity, artistic questions now are not so much concerned with these dataworlds per se but with the interface between them, between us, between our own minds and that larger field of consciousness we call the world.

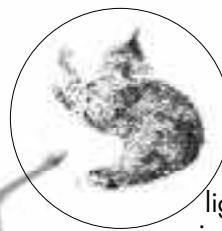
Whether or not Egan's fictive brain modifier gets to be developed, the fact is that our technologies of perception, cognition, and communication - the interface to the complex computer systems that both mediate our consciousness and construct our reality - are moving closer and closer to the body and into the brain. Just as the keyboard and mouse are being consigned to history, so too will the Head Mounted Display, the DataGlove, even the data suit will soon be consigned to the museum. Conceptually they already are. We want the systems interface set within our brain. We want the boundaries between "natural" and "artificial" to be as redundant technologically as they are becoming conceptually and spiritually. This is to talk about the post-biological body as interface.

Progressively, we artists want to be creative in cyberspace by controlling computer-mediated systems through biological input sensors and biocontrollers in our own nervous system responding directly to signals from the brain, eye and muscles. However, while the advent of neural interfacing will certainly have enormous consequences for the development of art in the Net, and as much as it fascinates our speculative nature, it is not the most fundamental question at present, for artists in cyberculture. More important to us now is the conceptual implications of the shift taking place in art from appearance to apparition, from object to process. Art, which was previously so concerned with a finite product, a composed and ordered outcome, an aesthetic finality, a resolution or conclusion, reflecting a ready-made reality is now moving towards a fundamental concern with processes of emergence and of coming-into-being. This raises critical, aesthetic, theoretical, and questions no longer important is political, much the of meaning as communications, that is to say a shared participation in the

creation and ownership of reality.

The revolution in art which prompts these questions lies in the radically new role of the artist. Instead of creating, expressing, or transmitting content, he is now involved in designing context: contexts within which the observer or viewer can construct experience and meaning. The skill in this, the insight, sensibility, feeling and intelligence required to design such contexts is no less than that demanded of the artist in classical, orthodox art. But the outcome is radically different. Connectivity, interaction and emergence are now the watchwords of artistic culture. The observer of art is now in the centre of the creative process not at the periphery looking in. Art is no longer a window onto the world but a doorway through which the observer is invited to enter into a world of interaction and transformation. The importance of telematic networks, of the inherent connectivity of cyberspace, in all of this, cannot be overestimated. These ubiquitous networks are themselves undergoing significant augmentation with the capacity and speed now available in the so-called 'dark' fibre, as George Gilder explains:

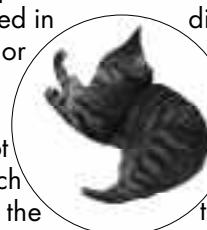
"Fibre comes in threads, as thin as a human hair, as long as the British Isles, fed by lasers as small as a grain of salt and as bright as the sun. A single fibre thread can potentially hold all the telephone calls in the United States at a peak moment of Mother's Day. Fibre is not really a replacement for copper (wires) ... it's a replacement for air. Dark fibre, lit with different colours for different protocols, will deliver one thousand times our present total broadcasting capacity. The recently developed Erbium Doped Amplifier which will send an



infinity of messages through glass on wings of light, is the communications engineer's Holy Grail - the dream communications system, capable of communicating over vast distances with huge information capacity".

So, dark fibre, boxed cats and biocontrollers are directly relevant to the development of art in the cyberculture, this domain of apparition in which natural intelligence and artificial life can interact creatively. Whatever the dominant media, whether electronic, optical, or genetic, the art of the cyberculture is generically interactive. This interactive art is characterised by a systems approach to creation, in which interactivity and connectivity are the essential features, such that the behaviour of the system (the artwork, network, product or building) is responsive in important ways to the behaviour of its user (the viewer or consumer). More than simply responsive, it constitutes a structural coupling between everyone and everything within the Net. This kind of work is inherently cybernetic and typically constitutes an open-ended system whose transformative potential enables the user to be actively involved in the evaluation of its content, form or structure.

Science fiction such as Egan's is not alone in positing scenarios in which human consciousness is seen as the instrument for creating reality. Outstanding amongst philosophers from the point of view of cyberculture is Paul Watzlawick whose contributions to Radical Constructivism can be seen as directly relevant to the interactive art aesthetic. Radical Constructivism is an incompatible with traditional thinking as interactive art is with traditional art. As early as 1973 the cybemetician and biomathematician Heinz von Foerster gave his classic lecture On Constructing a Reality showing how the environment, as we perceive it, is our invention, describing the neurophysiological mechanisms of these perceptions and the ethical and aesthetic implications of these constructs.



What both the art and technologies of cyberculture are able to show is that there is a radical shift in our perceived relationship with reality, where the emphasis has moved from appearance to apparition, that is from the outward and visible look of things to the inward and emergent processes of becoming. In this culture, neither the precise state of art nor its cultural status can be fixed or defined; it is in a constant state of transformation. This is not a state of transition between two known and fixed definitions or destinations, rather is it transformation itself as a defining characteristic, as intrinsic to the identity of interactive art as the composed and finite object was to its classical predecessor, interactive art is art in a state of endless becoming. It is art-in-flux. This is so at present both in stand-alone systems, whether hypermedia or multimedia in format, as much as in the Internet with its global multiplicity of inputs and outputs.

A culture concerned with appearances bases itself on certainties, a definitive description of reality. Uniformity of dogma, uniformity of outlook and goals, cultural continuity and consensus, semiotic stability, these are its distinguishing features. Within this larger frame, aesthetic changes, when they occur are merely cosmetic, the basic conformity to an approved model of reality remains. There have been paradigm shifts in art just as in science, but it could be argued that the canon of Western art has maintained a much longer consistency and continuity than science, since numerous scientific revolutions have come and gone while art's preoccupation with appearance, with the surface image, with ready-made reality has held for millennia.

In contrast, a culture concerned with apparition bases itself on the construction of reality, through shared perceptions, dreams and desires, through communication, and on the hybridisation of media and the celebration of semiotic instability. The shift in art towards apparition and construction as its primary concerns is a paradigmatic shift. We now realise that an art dedicated to appearance, simply gives the lie to whatever is the case, since the retinal gaze can penetrate very little

of the material state and almost nothing of the spiritual state of things. The surface of the world hides more than it discloses. Science in the 20th century has been based largely on what is invisible to human retinal vision since it has always attempted to comprehend the forces and fields, and relationships underlying "our" visual world. In the earlier art of the 20th century this also to some extent was true; Kandinsky, Duchamp and Pollock, distinguish themselves, in their radically different ways, by their attempts to reveal the invisible, and construct their separate realities. Of these, it was Pollock whose intimations of connectivity brought to modern painting the great commanding images of a networked world, in the swirling, circulating, linking, confluences of line and colour. It was Pollock who first brought the tight-framed picture window of painting off the gallery wall and onto the surface of the earth, marking out an arena for action and interactivity, and thereby laying the groundwork for those holistic ways of viewing, imaging and constructing, an entirely new attitude towards art and aesthetics, of which we in our digital space are the principal heirs and benefactors.

But until the effects of cybersculture were felt, until the radical implications for art of the new technologies had begun to be recognised and adopted, those artists whose practice, complicitly or unthinkingly, upheld the old orders of perception and knowledge, aided and abetted by the de facto controllers of representation and consciousness, the curators, critics, historians and dealers, resisted the radicalism of these pioneers. The great shame of American scholarship is that Pollock has never been properly appreciated or understood, nor, as Tim Hilton has noted in reviewing the current, disastrous Royal Academy Exhibition American Art in the 20th Century, has he ever been given a serious full scale retrospective, nor a fully sympathetic book. "America wishes him to be a dead movie star rather than an artist". And yet Pollock first created the aesthetic possibility, in a sense the historical permission, for our own radical constructivism in the cybersphere to come into being. Because, at base, working with networks, is a matter of attitude before it

is anything to do with machines. Telematic art is conceptually driven not technologically led. The fundamental concepts of art as action, interaction with the art-in-process, the artwork as arena, art as transformation, change, flux and flow, these are in origin Pollock's - with the acknowledged provenance of course of Navaho and the visual culture of Native America. If there is any link whatsoever between the art of cybersculture and the art of the pre-telematic era, it lies in the painting of Pollock. The link is one of sensibility not style, of attitude not form.

The collapse of the New York School, the market rise of resurgent German expressionism, the despairing floundering of post-modernist solipsism, the dismal return to nineteenth century academicism, figuration and narrative, the whole miserable confusion, demoralisation and splintering of art at the fag end of this century is evidence of the major paradigm shift which we are undergoing. Nothing is spared in the process: galleries become redundant, museums have to be rethought and redesigned, academies have to be abandoned and reconstituted, the patronage, placement and perpetuity of art are all to be reconsidered.

In our present understanding of the world, nothing is sufficiently stable for us to wish to give a permanent form to its representation. Nor do we wish it to be. We are on that evolutionary spiral which has returned us to a more Taoist desire for flux and flow, for change and transformation. No eternal verities present themselves as worthy of consecration in manuscripts or monuments. We want now an art which constructs new realities, not one which represents a world preordained, finite and ready-made. We want now an art which is instrumental rather than illustrative, explicatory or expressive. Rather than to simply embellish the world and add to its ornamentation, the artist of the cybersculture wishes to engage in its renewal and reconstruction.

Above all we do not need any longer, hovering like vultures at the periphery of the old order of art, those cultural theorists, critics and academics who winge and wince at technology, who wag endlessly their

disapproving and despairing fingers at the daring perceptions and dazzling innovations of science. Such "cultural theory" was often little more than ideological determinism dressed up in pretentious rhetoric, show without action, ideally suited in these latter years to preside over the demise of the old order of art, the art of appearance.

Art in the cyberspace is emerging out of the fusion of communications and computers, virtual space and real space, nature and artificial life, which constitutes a new universe of space and time. This new network environment is extending our sensorium and providing new metaphysical dimensions to human consciousness and culture. Along the way new modalities of knowledge and the means of their distribution are being tested and extended. Cyberspace cannot remain innocent, it is a matrix of human values, it carries a psychic charge. In the cyberculture, to construct art is to construct reality, the networks of cyberspace underpinning our desire to amplify human cooperation and interaction in the constructive process.

ROY ASCOTT:
DIRECTOR OF THE CENTRE FOR
ADVANCED INQUIRY IN THE
INTERACTIVE ARTS NEWPORT
SCHOOL OF ART AND DESIGN
GWENT COLLEGE OF HIGHER
EDUCATION.



THE EDIT:

MONTAGE AND TEMPORAL DESIGN IN MULTIMEDIA.

Mike Phillips

INTERACTIVE MULTIMEDIA PRODUCTION RELIES HEAVILY ON SCREEN ARCHITECTURE, GRAPHIC STYLE, AND ICONOGRAPHY. MUCH HAS BEEN WRITTEN ON THE USE OF TEXT, ICON DESIGN, NAVIGATION AIDS AND THE USE OF METAPHOR. THIS HAS PRODUCED A NUMBER OF VISUALLY ATTRACTIVE BUT STATIC INTERFACES. GRAPHIC DESIGNERS ARE TRAINED TO MANIPULATE THE STATIC. THEIR ROOTS LIE ON THE 2 DIMENSIONAL PRINTED PAGE NOT IN THE FLICKERING SHADOWS ON THE 4 DIMENSIONAL SCREEN. INTERACTIVE MULTIMEDIA IS A TIME-BASED EXPERIENCE, A TEMPORAL ACTIVITY WHICH HAS ITS OWN DESIGN CRITERIA. **THINGS CHANGE.** INTERACTION, WHETHER CLICKING BUTTONS OR NAVIGATING A 3D FLYTHRU, TAKES PLACE THROUGH TIME. THESE NEXT FEW MINUTES FOCUS ON SOME HISTORICAL EXAMPLES IN AN ATTEMPT TO EXPLORE THE NOTION OF '**TEMPORAL DESIGN**'.

It is easy to forget that every thing mediated has been edited, by the author and the medium. The technical structures, design limitations, within which all work operates are an integral part of the message. These structures become the syntax of the language of a communications form. It is the absorption of these structures into our perception of the world that allows us to suspend our disbelief and enter into the 'reality' of a piece.

In the C14th all information (or all knowledge that was deemed to be needed) was communicated by light passing through stained glass windows. The narratives depicted within these windows are crisscrossed by a mass of black lines; lead gives the brittle glass its skeleton and flexibility. This structural limitation of glass is vital to the stain glass aesthetic. Stain glass just would not be the same without it. Maybe now we are more interested in the black lines, the light structures, the syntax, than the knowledge conveyed.

T.V., film, & video, our present day windows through which all knowledge is illuminated also has its black lines. Not just the edges of the screen but the edits and transitions. The techniques of assembling and conveying information and constructing narratives, are controlled electronically through the use of camera movement, video effects and the edit suite.

This process of editing is now embedded in our consciousness. The flow and ebb of a text (film, sound, words) is constructed by the author and re-edited by the viewer. Ever read the last page of a novel first?

We have developed a sophisticated understanding of the "media". We no longer run from a grainy, stuttering, black and white image of a train entering a station as the audience of this short film did back at the dawn of the century.



The structures that underpin our reading of a text are complex, yet we learn to accept and understand them through formal teaching, osmosis and repetition. The process is self rewarding, it's entertaining and we enjoy it. It is often only when these structures are parodied or applied differently that we realise the level of unconscious acceptance and application. Try this cartoon strip. Its written in Arabic, it flows from right to left. Not only do we have difficulty translating the text we also find the visual narrative difficult to comprehend.



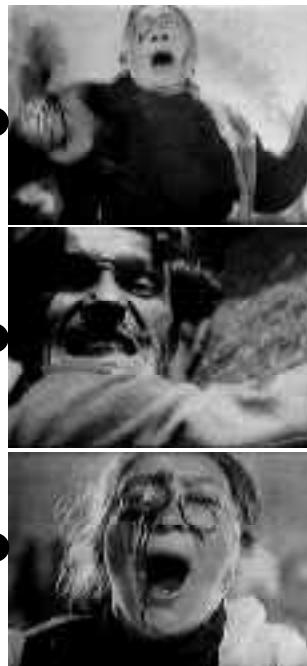
Watching an episode of Dallas we can see the exterior of a skyscraper (long shot) followed by an image of person sitting at a desk (medium close-up) and know instantly without any apparent mental processing that that desk is inside that building, we may even have a mental image of which floor its on.

We are quite happy to absorb millions of images, facts and suppositions conveyed through a complex language of jump cuts, fades and mixes. A language who's accent our great grandparents would find incomprehensible. Messaris discusses the "invisible style" of the Hollywood film and our inability to see the construction techniques. Because we understand and are fluent in this visual language, no translation is necessary, we assume that it is natural, a naturalistic language, and that the medium is neutral, transparent.

P MESSARIS,
VISUAL LITERACY,
1994.

OUR ABILITY TO NAVIGATE A TEMPORAL EXPERIENCE IS
NOW SO CLOSELY LINKED TO FILM AND TELEVISION THAT
WE HAPPILY AND UNCONSCIOUSLY ASSIMILATE AND
MERGE OUR EXPERIENCE WITH FILM EXPERIENCE.

It is not simply the technical structures, the similarity (or dissimilarity) of the camera and the eye, that have created this shift in perception. The design and construction of the moving image has also altered our sense of time. Eisenstein's Odessa Steps sequence (*Battleship Potemkin*) is a classic example of shifting and extending time through montage techniques. To run down the Odessa steps takes about 90 seconds. Eisenstein's Steps sequence takes approximately seven minutes. The viewer experiences a range of time zones, the characters individual time-lines, the shift in perspective from onlooker to the camera's vantage point.



...and of course the powerful emotional experience the editing creates, the complex relationships between the viewer and the characters. We see the old woman, we see through her eyes, we are drawn into her emotion. We see the old woman, through her eyes we see the Cossack, we see the Cossack striking out, we become the victim.

Whilst film has been seen as extending perception rather than altering it, the greater our familiarity with a medium the more we incorporate its editing techniques into our consciousness and our understanding of our environment. We describe our world using media terminology; a car accident happens in slow motion, "I feel like I'm living in a 1930's black and white film", a flash back, a pan, a fade, etc. And whilst these techniques may have been developed to mimic or express human experience we can now no longer remember what accidents felt like before film, before frames, before slow motion existed. We articulate our internalisation of the external using media terminology. We think it that way, as a window, a frame, a mirror, and a process of reflection.

"VISION IN MOTION

IS A SYNONYM FOR
SIMULTANEITY AND
SPACE-TIME;
A MEANS TO
COMPREHEND THE NEW
DIMENSION.

VISION IN MOTION
IS SEEING WHILE
MOVING.

VISION IN MOTION

IS SEEING MOVING
OBJECTS IN REALITY OR
IN FORMS OF VISUAL
REPRESENTATION AS IN
CUBISM AND FUTURISM.
IN THE LATTER CASE THE
SPECTATOR, STIMULATED
BY THE SPECIFIC MEANS
OF RENDERING,
RECREATES MENTALLY
AND EMOTIONALLY THE
ORIGINAL MOTION.

VISION IN MOTION

ALSO SIGNIFIES
PLANNING, THE
PROJECTIVE DYNAMICS
OF OUR VISIONARY
FACULTIES."

L. Moholy-Nagy,
Vision in Motion,
1946.

AND WHAT OF MULTIMEDIA?

Interactive Multimedia is experience through time. An interaction requires a cause and effect, but there is little evidence in most multimedia products of an exploration or application of temporal design. Timebased activity is reduced to the technical, a page turning activity, simple page to page transitions.

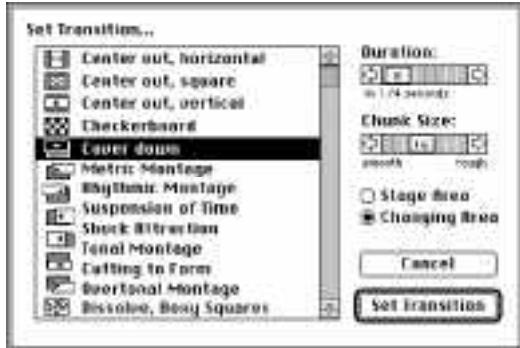
A Hyper-link is an edit. The sterile montage, the denoted message, the obvious meaning. No suspension or manipulation of time, lacking in emotional content.

There is the fascination of surfing the World Wide Web, the discovery of bits of information. How long will this fascination last, when will the magic of the technique fade? Just another grainy, stuttering, black and white image of a train pulling into another station. Where is the connoted message, the montage of two distinct meanings, the creation of the third.

Maybe Mosaic v10.1 will be endowed with intelligent editors ("virus directors" roaming the net creating meaning out of raw data), a dialogue between points of information sensitive to the experience of the user, weaving an interactive narrative as emotive as the Odessa Steps.

NSCA MOSAIC
CURRENTLY VERSION

1.0.3.



"I FEEL LIKE I'M LIVING IN A HYPERCARD V5.1 STACK..."

Of course the point is that there is no 'Author'. No Eisenstein to construct and navigate for us. Hypermedia allows the users to be the authors of their own narratives. Will we see the multimedia equivalent of the DTP design fiascoes that came with the democratisation of that technical process. Or will we see the rise of a Hyper-speak that embraces both technique and content.

Will we become as used to the Hyper-link as we are to the jump cuts in Soap Operas. An 'invisible Hyper-style'. In several years time what will we 'feel' when confronted by a choice in the direction of a narrative.

HYPERCARD
CURRENTLY
VERSION 2.2.



SOME PEOPLE
DREAM OF WORTHY
ACCOMPLISHMENTS.



PAUL MAGUIRE:
ARTIST, TECHNICAL ASSISTANT
AND TUTOR FOR THE ELECTRONIC
MEDIA RESOURCE AT THE
SCHOOL OF FINE ART
GLASGOW SCHOOL OF ART.



...WHILE OTHERS
STAY AWAKE
AND DO THEM.

