

## **THE SADEIAN INTERFACE.**

### ***Computers and Catharsis.***

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This paper explores the limitations of contemporary interface design and offers the potential of more profound forms of interaction by drawing on the rich and much older heritage of interactive art. Whilst HCI design is preoccupied with making the computer more simple to use, installation work, kinetic sculpture, and interactive multi-media art forms have generally been more concerned with the predicament of human/technological negotiation, whilst remaining a salient form of human communication. HCI activity sets out to make the complex systems of computing easy to understand and use, whilst interactive art often uses simple technology to make complex, inspiring and esoteric statements and experiences. In many ways the more simple and ‘low resolution’ the technology the more immersive, acute and intimate the experience. ‘Low resolution’ examples such as telephone-sex-lines are explored along side more immersive systems, such as biofeedback interfaces, and other interactive experiments drawn from the ‘technic’ strand of art history.

*Keywords: pain, design, metaphor, interactive, interface*

## 1. A Hammerphor A Fossilised Metaphor:

Metaphor is often used as the key to achieving greater accessibility by providing users with a 'familiar' way of negotiating through the computers complexity. In nearly all cases the application of metaphor within interface design has severe limitations, given the suspension of disbelief can only be stretched so far. However, one of the often ignored problems with the use of metaphor is that, as well as reducing the potential of a computer to fit known human experience, it reduces the 'real' object or process to a simplistic level in order that its characteristics can be transferred to the computer. By reducing the 'real' world to simple icons and actions designers ignore a fundamental element of human activity, namely the continual negotiation with the real world. By refining human experience of the real world and siphoning off these complex interactions the resulting interface will inevitably be sterile and uninteresting. It is the difficulty with which humans negotiate the real world that makes life interesting and engaging. The more difficult the activity the more rewarding the gains. The 'no pain, no gain' approach to interface design discussed within this paper offers the potential of enabling deep, profound and cathartic experiences through human computer interaction.

*Person 'A': "Pass me the hammerphor."*

*Person 'B': "What's an 'hammerphor'?"*

*Person 'A': "Knocking in nails!" (1)*

*Person 'C': "Pass me that metaphor."*

*Person 'D': "What's a 'metaphor'?"*

*Person 'C': "A metaphor is - n. a figure of speech in which a word or phrase is applied to an object or action that it does not literally denote in order to imply a resemblance..." (2)*

In practice the GUI (Graphical User Interface) hardly deserves the label of 'metaphor'. Likewise the term 'icon' is a crass simplification, stripped of its rich spiritual and artistic heritage. The technological determinants that require us to look at pretty pictures in order to understand, not only reduce the richness of the world to 2 dimensions, but also reduce 'meaning' to a level of simplicity that ignores the rich discourse of literature and philosophy. I am as guilty as the next designer, in that I have sweated blood for hours trying to invent a new 32x32 pixel icon for that obscure screen interaction, but in the end what I and most designers have come up with is catachresis, not metaphor. They may signify something, although most fail to do that beyond marking a space on the screen that marks the spot where the interaction takes place, but as metaphor they are dead and fossilised.

The screen is 'window' on the internal workings of the computer or a 'mirror' which reflects our intentions and ambitions. We see on the surface our aspirations and failures, a point of contact, an intimacy between the computer and the user. If this intimacy is framed by dead and fossilized metaphors how clear will the visions revealed or reflected be? A better model might be the successor to the Phantasmagoria magic lantern show, the theatrical optical illusion employing virtual images in an angled sheet of glass and variable illumination, the 'Peppers Ghost'. In its day (circa 1860) the illusion was so convincing that even the scientist Michael Faraday found it incomprehensible, until he actually touched the glass. Here we have an illusion that is both mirror and window. By varying the illumination in the spaces behind and in front of the angled glass

sheet composite images can merge and fade. When looking at the computer screen the user sees, through varying degrees of mental illumination the reflection, the human computer composite, and the computer. The 'virtual' image in this scenario applies to the user rather than the computer, the screen is the sheet of glass and the digital content the true image. Like the window and mirror metaphor above, our reliance on the interface between vision and language lies at the heart of the GUI design problem. If metaphor is "a figure of speech in which a word or phrase is applied to an object or action that it does not literally denote in order to imply a resemblance", a rich process that breathes through interpretation, then the reverse process of trying to represent literally an action through an 'icon' must surely produce stagnant and ultimately meaningless metaphor.

## **2. Three in the bed and the little one said...:**

Human Computer Interaction is a complicated area of study and practice, which combines two rather uneasy bedfellows, Psychology and Computer Science, and often ignores a third partner, 'creative' Design. Even when employing troilistic design, the focus of most interface design is the screen and the fairly immediate layers in front (interaction initiated by the user) and behind (impact of user activity on internal processes). 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 a multidisciplinary mind. Traditionally the 'graphic' designer has been the poor relation in the HCI designer threesome, reduced to making things look 'nice', an activity that can be seen by the other two disciplines as being trivial. If the role of the creative designer is just to make visual catachresis then the accusation is justified.

Part of the reason why interface design is seen as trivial decoration is the inability of creative designers to articulate the creative process. Creative design process generally falls outside the protocol of the scientific method, into 'black box' territory. It can not be described, adequately measured or proved through experiment. The knowledge and understanding of media form is manifest through the making of media, so that unlike scientifically based disciplines little effort is generally made to articulate the processes employed in media creation. The output is often as undefined as the input, neither top down or bottom up design. Discourse surrounds its consumption and informs its production, but this is not objective, empirical or experimental. Indeed the intent with many media forms is to bypass the viewer's objectivity and generate a new experience. "The images have no narrative meaning, they are rather a series of visual stimuli intended to create a psychological drama within the viewer, 'rousing the mind by osmosis without verbal transposition'." (Curtis, 1972)

The interactive montage of information, text, sound, image, animation, digital video, infused with seductive qualities promises to revolutionise the way people use and work with computers. 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. New media engenders new affordances. The elements that are used to construct new media forms have an established vocabulary, and a discourse exists that may adequately describe the integration of these elements. Media theory offers a provocative and juicy language to articulate and understand the non-objective complexities of static and time based imagery. One of the reasons traditional (old) HCI is such a moribund subject is that it

has failed to acknowledge that it is actually dealing with systems of human emotional system and meaning, and not just a system of measurable cause and effect. New Media is concerned more with sounds and visions than with bits and bytes.

An enduring criticism of new media products is their lack of emotional engagement, and the fact that people generally find a greater sense of immersion in a book than they ever do in info/edu-tainment products. It is of course possible to account for this by recognising the fact that verbal/written communication has been an integral part of human evolution, whereas integrated and interactive media has only been possible for two decades. Any audience must be forgiven for not understanding the complexity of new media forms, the failure of new media to touch must surely be the fault of the audience? It couldn't possibly be that 'writers' are considerably better at 'writing' than 'New Media' designers/makers are better at making 'New Media'?

### **3. 'Simile, you're on candid camera...':**

Digital media forms have a 'heritage', the integration and saturation of media forms in the cultural environment ensures that casual consumers take the complexity of audio visual language, and the distributing technology, for granted as a continuum of this heritage. Screen design can trace a clear lineage through print, graphic design, typography, photography, and other '2D' forms of representation. The evolution of aesthetic forms is based on a symbiosis of technological and cultural determinants: painting provided an aesthetic for photography, print making (etching) inspired the process; illuminated texts inspired metal type, and the mechanical press informed the structure of page layout; theatres impact on cinema and cinemas impact on T.V., and T.V.'s impact on video... Complex languages of editing, camera angles and effects have evolved to the point where we may even think in film forms. As yet we have no obvious 'interactive' heritage, apart from the short history of data navigation. We can look to the theatre for inspiration, we can look to architecture for spatial models, psychology for theoretical underpinning, in fact we can see models and metaphors in everyday human interaction and the structures that contain them. It is the convergence of these design practices that should be forcing a paradigm shift to a holistic media experience rather than a fragmented mish-mash of muddled aesthetics.

"Our fine arts were developed, their types and uses were established, in times very different from the present, by men whose power of action upon things was insignificant in comparison with ours. But the amazing growth of our techniques, the adaptability and precision they have attained, the ideas and habits they are creating, make it a certainty that profound changes are impending in the ancient craft of the Beautiful. In all the arts there is a physical component that can no longer be considered or treated as it used to be, which cannot remain unaffected by our modern knowledge and power. For the last twenty years neither matter nor space nor time has been what it was from time immemorial. We must expect great innovations to transform the entire technique of the arts, thereby affecting artistic invention itself and perhaps even bring about an amazing change in our very notion of art."

(Valéry, 1964.)

We have a gleaming new technological pen with hyper-linked ink, and yet we insist on reproducing our monosyllabic utterances, a Cyclops with binoculars, cave painting with lasers, we lack the language and thought process, to manipulate

and articulate. By viewing the computer as a digital 'paintbrush' we are denying the development of the technologies quintessential aesthetic, suppressing emergent form. The legacy of the media elements that construct new media provide a safety net (to be kind) or a safety blanket (to be truthful) for digital designers. Typographers have been thinking in metal type and strips of lead for too long, photographers are too 'fixed' by their developer, and writers too typecast by their own scripts. The most significant factor in the demise of new media publishing in the 90's (apart from bad management) was the dominance of graphic designers in defining the look and feel of products. Two-dimensional minds shovelled Two-dimensional 'book' content into the screen dimension and generated endless supplies of pseudo-metaphors held together by lashings of decorative interface. Unable to make the dimensional leap through to the 3<sup>rd</sup> dimension, towards the 4th (temporal), and finally the 5th dimension of interaction, the new media industry all but imploded under gravitational pressures of its Two-dimensional reality. In general Art and Design education continues to produce one-dimensional, single discipline practitioners who continually fail to think and act on a multidimensional level.

So, we are left with an interface that consists of an optical illusion that reflects back to us our inability to deal with new media other than in cheap metaphor: 'its a bit like film', 'its a bit like text', 'its a bit like photography'. 'Oops', those are simile. Well thats a bit like a metaphor, you can use it to knock more nails into the new media coffin. In this version of the digital 'Peppers Ghost' we see neither our true selves nor the true computer.

#### **4. Enjoying Human Computer Interaction:**

“(72.) The more pain I train myself to stand, the more I learn. You are afraid of the pain now, Unk, but you won’t learn anything if you don’t invite the pain. And the more you learn, the gladder you will be to stand the pain.”  
(Vonnegut, 1959)

I once read a prescription for ‘good’ interface design, which stated that an interface should be ‘polite’, ‘friendly’ and ‘enjoyable’. Having been raised a good Catholic I could easily relate to this suggestion, but also recognised that lurking underneath there must be something far more sinister. Wherever there is pleasure there must also be pain in that the two are intrinsically linked. In practice the gratification obtained from using a computer reaches outside the grey box and into the psychic and social life of the user. Thimble (1990), in his outline of the benefits of employing a user interface, highlights ‘enjoyment’, among others, as being a primary benefit for the user:

"Enjoyment: The user may wish to enjoy himself through using the interactive system. Obvious examples are playing games, hacking programs, exploring interesting problems and using the computer as a medium to communicate with others. Less obvious examples are creative systems for musical and artistic design, or word processors for easy verbal expression. Users may obtain enjoyment from using an acquired skill with a complex interactive system. Paradoxically, the ‘worse’ the system design, the more it may be enjoyed *after* getting used to it: users may find satisfaction by being repositories of detailed information about a system! However, such users would not have had status if the system had been so easy to use that there was no need for experts. Enjoyment may be quite subtle; for instance, if some users have certain special skills, they may prefer to be in a position where an organisation relies on goodwill." (Thimbleby, 1990)

To achieve the level of expert the novice user must perform Herculean tasks, involving great discomfort. Once achieved this position wields power over others. The problem with most interface design is that it considers only the most immediate layers of human computer interaction, the user, the screen and the computers actions, and not intimate interaction with others. The computer is isolated, an object to be acted upon and to respond accordingly. There is little emphasis on the 'dialogue' that builds up as a result of this cause and effect, especially as the computer is increasingly found at the centre of human social networks.

“...human beings rarely appear as psychological individuals. They are usually in symbiosis with others, each supplementing the various psychological defects of the other.” (Harré et al, 1985)

The 'psychological defects' of the computer 'expert' within a social environment, as outlined by Thimbleby, are often vital for the wellbeing of the workplace, and the self-satisfaction gained by maintaining network servers late into the night can reach almost heroic proportions. The enjoyment of using a good looking GUI is nothing compared to the pleasure of controlling a network, knowing all the user id's (and egos) and allocating/restricting file space. It is interesting that the personal computer wrestled control from the mainframe manager and the IT service department and placed it firmly in the hands of the user, a process of empowerment. As our reliance on networks increases we are slowly devolving control back to the service providers and the network administrators. To evolve HCI needs to consider not only the media design of the screen but also the complex social interactions that take place beyond the screen, into the social environments that surround computer networks, and the virtual environments that support new social networks. Here we have another dimension for the new media designer to deal with; the fifth dimension of interaction explodes to embrace new psychological and virtual worlds.

"Virtual worlds should not be seen as an alternative to the real world or a substitute, but as an extra dimension which allows us a new freedom of movement in the natural world. In other words the transcendence of physicality in the virtual world allows us to extend our mode of operation in the physical world. A new means of travel, a new form of communication, a new way of operating, a new medium of expression." (Frazer, 1995)

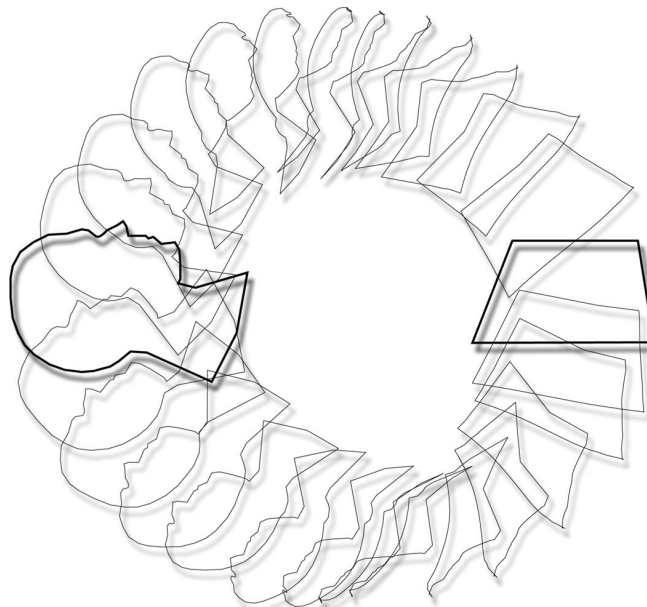
Reflected in the screen we can see ourselves expanding into the greater social milieu, and looking through it we can see a vista of new virtual domain. As with any conquest of a new territory there is bound to be discomfort and pain until the terrain is mapped and thoroughly explored, then it can be enjoyed. We will not learn anything by hiding behind traditional disciplines and social hierarchies, we must learn, as 'Unk' did, to enjoy the pain of transcendence.

## 5. A Continuum of Blended Internal/External Realities:

Fascination with the body and its relationship to technology runs deep through the modernist machine aesthetic. The post-modern body freely dissolves into the technology that surrounds it, and “the plastic, if not ludicrous” (Gray 1995) distinctions between body and tool melt away. The symbiosis evident/required in the cyborg is one of meat and metal, a Léger painting manifest, not one of soul and intelligence or intuition and logic. Lying somewhere between the violent fusion of bone and metal and reductionism of ‘old’ HCI lies a relatively new and enlightened area of study. ‘Activity Theory’ articulates the subtle relationships that exists between humans and the tools they use, and explores the complex feedback loops between the impact the use of a tool has on the environment and the impact the modified environment then has on the human.

“The idea is that humans can control their own behaviour – not ‘from the inside’, on the basis of biological urges, but ‘from the outside’, using and creating artefacts. This perspective is not only optimistic concerning human self-determination. It is an invitation to serious study of artefacts as integral and inseparable components of human functioning” (Engeström, 1991)

Within this context the concept of the computer as a passive ‘tool’ to impact on the world or achieve a given end, seems limited and one dimensional. Transcending the mere ‘tool’ the computer can operate as a medium for human expression and experience, where the impact is on the psyche or mental world of the ‘user’-‘spectator’ rather than the external world. Through the computer it is possible to blur the distinction between the ‘outside’ and the ‘inside’; the ‘outside’ becomes a manifestation of the ‘inside’, and the ‘outside’ is reconstituted in the mind, a continuum of blended internal/external realities (figure 1). Within this continuum of mutual reinforcement the inside/outside can equally be extended to the greater social milieu on both sides of the screen. The pleasure and pain of interaction becomes a fervour, an orgy of networking.



*Fig 1: ‘a continuum of blended internal/external realities’.*

As the computer evolves from an isolated 'artefact', through physical and social networks into an all-pervading system or process, the nature of our relationship with it will inevitably change. Activity theory articulates a sophisticated symbiosis that exists between our tools, and us, what happens to that relationship when the tools we manufacture become not only ubiquitous but also autonomous? The process of interaction begins to involve not just the 'inside' and 'outside', but also the autonomous 'other'.

Computer imaging systems have revolutionised our relationship with the 'inside' (e.g., medical imaging technology), 'outside' (e.g. security monitoring systems, remote sensing satellite images) and the 'other' (e.g., Search for Extra Terrestrial Intelligence). Vision dominates our culture and lies at the heart of scientific and artistic endeavour for truth and knowledge. Increasingly the hegemony of the human eye is being challenged by a new generation of technologies that do our seeing for us. These technologies raise critical questions about the nature of the truth and knowledge they illicit, and the way in which we interpret them. Images and data generated by these systems question the way we perceive our environment and ourselves. The process of imaging says as much about the observer as it does about the observed, will these autonomous systems 'know' the 'truth' when they 'see' it? Will we recognise ourselves when seen through our artificial eyes?

## 6. The Ultrasonic Peepshow:



*Fig 2: Cyberbaby*

In 1987 I sent my unborn son into Cyberspace; with the aid of an ultrasound scan, a MacPlus and several million Pounds of global computer network. As part of the '*Digital Body Exchange*' (3) project it seemed an appropriate and justifiable thing to do. Indeed, he is now rather pleased at being the first baby (probably) in cyberspace. However, looking back at the process involved it seems strangely exposing. Taking a photograph of a baby is one thing, taking a sonograph (figure 2: Cyberbaby) of the inside of the body is surely another. Now exposing the internal workings of the body seems more socially acceptable than exposing the naked body. Exposing a foetus in this way is pure technological voyeurism, to distribute it over a digital network, is voyeurism on a global scale. The enabling technologies that here expose and make manifest the internal organs and bodily processes form a continuum from the ultrasound image, through the family snapshot, to the



peepshow booth. They all imply 'knowing' and embody 'knowledge; discovery, memory and carnal. Each form carries its own intrinsic politics, which is rooted in social taboo and the technology and procedures that surround it. Consider the motivations behind the ultrasonic peepshow:

"Obstetrics is a special case because the patients are uniformly women, and are generally not ill, and it is clearly an area where male doctors can have no personal experience of the 'condition' being treated. So their claims to expertise might appear tenuous to women. Oakley argues that technology is particularly attractive to obstetricians because techniques such as the stethoscope and foetal monitoring enable male doctors to claim to know more about women's bodies than the woman themselves." (Wajcman, 1991)

Here the knowledge engendered (and 'gendered') by the technology objectifies the female form, specifically the internal form. And yet ultrasound images adorn family albums along side first steps and first birthdays. The knowledge, or assumed knowledge, is here transmitted through low-resolution images. The resolution of the experience is extremely low. The grainy black and white image is similar in resolution to the brief glimpse of the internal workings of the body offered by the bio-feedback system, mist clearing momentarily on a scene which will remain veiled. Stare at the grey patterns emerging through the emulsion (is that a head, heart, spine?) and they draw you into a place you used to know but cannot remember.

I saw my son's face recently, as it originally appeared in those ultrasound images. They were the blurred and faded images sent back by the 1976 Viking Orbiter from the surface of Mars. They revealed little to the naked eye, until they were digitally processed, slowly revealing a skull like face that gazes from the surface of mars. The technology strips away the grain and fuzz and re-visions, the 'face' becomes gradually un-obsured, progressively un-veiled, with features suggestive of eyes, a ridge-like nose, and a mouth, its 'truth' emerging through the technology. From innerspace to outerspace, these processing techniques allow us to see more clearly the images we nurture inside our heads, just bringing into sharp focus the things we want to see. These tools that 'image' flatter our expectations, nurture our assumptions and reflect our own likeness.

## **7. The Anguish of Actuality:**

Low-resolution media does not mean a low-resolution experience. Feedback between the body and its environment, whether mediated through technology or not, always requires an internal mental manifestation for the dialogue to be complete. Consider the filtered reality of phone sex. Sexual gratification is attained using a mono-media at extreme low resolution. The 'aesthetic' of the 'form' relies on the grain in the dialogue, which may actually enhance the internal manifestation. Does the complex realisation of the 'internal' enabled through the computer's grain significantly enhance the level of such a dialogue, allowing the spectator to transcend what Carter describes as 'existential solitude'?

"When pornography abandons its quality of existential solitude and moves out of the kitsch area of timeless, placeless fantasy and into the real world, then it loses its function of safety valve. It begins to comment on real relations in the real world. Therefore, the more pornographic writing acquires the techniques of real literature, of real art, the more deeply

subversive it is likely to be in that the more likely it is to affect the reader's perceptions of the world. The text that had heretofore opened up creamily to him, in a dream, will gather itself together and harshly expel him into the anguish of actuality." (Carter, 1979)

Now that pornography is escaping the 'placeless' and finding an interactive 'place' in cyberspace, will it gain the power to 'affect the reader's perception of the real world' or simply enhance the internal dream world? The cathartic experiences offered by an intimate interface with the computer enable complex levels of interaction with both the internal and external environment. Indeed it is this complexity within the relationships between the user / audience / observer / voyeur / participant / spectator / actor / and the interface that makes the dissolution and submission of the body so sensuous and intimate.

"The cognitively induced deception of perception is a useful phenomenon for visual simulations, but why not extend the psycho-physical relationships between the real and virtual worlds and mold deadly and sensuous phenomena into the virtual dimension?" (Stenslie, 1998)

The body is a 3 dimensional form that occupies space. Immersive works such as 'Osmose' "reaffirm the central role of the subjective physical body in virtual space." (Davies, 1997) and extend this space by revealing the spaces that occupy the body, and allowing access to new forms of space, through the merging of internal, external and mental places, in cyberspace. It is important to remember that these are spaces and not just images of spaces, and that the experience of space is the product of bodily interaction, not just visual perception.

"In OSMOSE for example, instead of relying on hand-based manipulation of various interface instruments which support a disembodied and controlling stance towards the world, we developed a body-centred approach using breath and balance, enabling the participants to 'float' by breathing in to rise, out to fall, and learning to change direction. This method, partially informed by the practice of scuba diving, frees immersants from the urge to 'handle' things and from the habitual gravity-bound modes of behaviour such as walking or driving on a flat horizontal surface. Use of breath and balance was also intended to reaffirm the central role of the subjective physical body in virtual space." (Davies, 1997)

By becoming a vehicle for exploring these new places the computer transcends the tool and extends the body. It no longer needs a metaphor for interaction; it constitutes its own 'actuality' and interaction. However, with this release from the clean 32bit world of the icon and other trappings of conventional HCI, comes the 'anguish' of this new 'actuality'. It's not the visceral welding of tissue and silicon that causes the anguish, it is the catharsis and pain of self-knowledge.

## 8. The Metaphysical Fog:

“Can the computer screen act as a clear-cut barrier separating cyberspace from real space, the space of mental inhabitation from the physical space of corporeality? What if the boundary is more permeable than the smooth glass finality of the screen? What if it is no longer clear where matter converts into information and information is reconfigured as matter or representation?” (Grosz, 1997)

The seepage from the world behind the screen to the ‘inside’ and from the ‘inside’ to the world behind the screen is explored through my work with bio-feedback systems (figure 3, ‘*Umbilical*’). Here, with the use of simple ‘psycho-galvanometers’ or lie detectors, the body is interfaced directly with the soft and hardware of the computer. The internal psycho-physical state of the body is integrated into the computer system, forming a tangible physical and emotional dialogue. By using the relationship between skin resistance and the psychological state of the ‘spectator’ (here the user becomes the used) to feed the screen display, a visceral symbiotic dialogue is generated. The screen triggers a response in the spectator, which triggers a response on the screen. A calm spectator generates an aggressive image/sound/text, an agitated spectator generates a calming image/sound/text, and the cycle is repeated until the spectator gains control of the body, which is extended into the digital system. With this control comes the realisation that the spectator is aware of their own internal processes, a sense of domination of the autonomic nervous system. The insides are manifest externally and Stelarc's ‘metaphysical fog’ clears momentarily.

“We mostly operate as absent bodies. That’s because A BODY IS DESIGNED TO INTERFACE WITH ITS ENVIRONMENT – its sensors are open to the world (compared to its inadequate internal surveillance system). The body’s mobility and navigation in the world require this outward orientation. Its absence is augmented by the fact that the body functions *habitually* and *automatically*. AWARENESS IS OFTEN THAT WHICH OCCURS WHEN THE BODY MALFUNCTIONS. Reinforced by Cartesian convention, personal convenience and neuro-physiological design, people operate merely as minds, immersed in metaphysical fog.” (Stelarc, 1995)

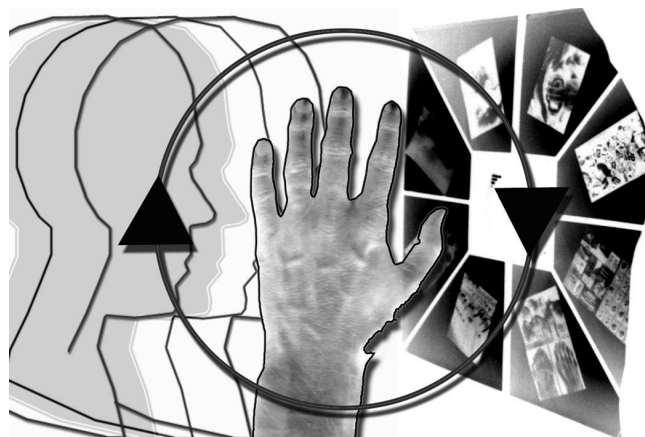


Fig 3: ‘*Umbilical*’, Biofeedback Experiments

However, the resolution of this glimpse through the fog is often enough to shock and purge. Listen for a moment to your own breathing; listen to your heartbeat. Awareness brings with it catharsis ... breath... pump... it hurts to know ... breath... pump... as the rhythm becomes more consuming the control becomes more tenuous, ... breath... pump... all senses start to turn inwards, to a 'place' they were not designed to understand and struggle to articulate. If the panic gets too much, stop!

## **9. The Body of Evidence:**

I had a few stomach problems several years ago, a duodenal ulcer which I had been nurturing for several year, in complete ignorance, suddenly decided to perforate an artery. After the slow fade was stabilised I saw the first views of the inside of my body, beamed back from the interior, looking something like a viscous moon landings. A cathartic experience: my internal organs exposed and laid out in front of me on computer monitors, popped inside out, on a slow journey down the oesophagus into the gut. There were several such invasions, the room of technology that surrounded me entered my body, fusing me with the architecture, a node on a network. Machines beeped as I tried to consume a few meters of cable, before trying to swallow the whole room. And there it was, my inside, emerging in front of me on the monitors as I swallowed, in full Technicolor pixel by pixel at 25 frames a second. If I had continued to swallow the whole room would have been shown there too, trapped in the digestive recursion. I half expected to feel the full glory of the cyborg fervour, but instead as this most intimate of interactions continued, a trust (or an assumed and untested trust) that I had always had in my body slowly shifted to the technology. It seemed more reliable, at least you knew when it had broken down, it couldn't pretend to be functioning correctly. Slowly, as the technology seeped into me, the unpleasantness and pain receded to be replaced by a submission and dependence. An act of faith?

“There were no corpses in the time-tombs, no dusty skeletons. The cyber-architectonic ghosts which haunted them were embalmed in the metallic codes of memory tapes, three-dimensional molecular transcriptions of their living originals, stored among the dunes as a momentous act of faith, in the hope that one day the physical recreation of the coded personalities would be possible.”

(Ballard,1992)

Donald Rodney died on 4th of March 1998. Ten years before the magazine 20/20, in a review of one of his exhibitions, announced his recent death. Rodney was not dead but dying, the premature announcement predicted the inevitable result of a Darwinian curse, which had afflicted him since birth. Sickle Cell Anaemia is a long slow degenerative disease, which resulted in Rodney's incarceration in hospitals and various technological apparatus. The result of this lifetime of physical atrophy was a creative mind that had a chillingly surgical perspective on the human condition. His physical condition provided an emotive palette for the acute and richly disturbing creations that populated his shows, with pieces literally etched from his body. Rodney's body had, for many years, existed in a close symbiotic relationship with the medical technology that has kept him alive. How many rooms had he swallowed? This relationship left a data trail of information: photographs, X-ray's, scans, measurements, data, scars, and imprints. This body of data, a body of images and measurements still exists.



Fig 4: Montage machine

AUTOICON (4) was one of the many projects Rodney was working at the time of his death, the intention was to integrate the body of medical data with an 'expert system' synthesised from interviews, and a rule based montage machine that would allow Autoicon to carry on generating works of art. The 'Donald Rodney Autoicon' is a multifaceted record of his body, a 'data' body, and a body that will now remain active in cyberspace. More importantly the Autoicon attempts to encapsulate the creative mind of Rodney. Whilst many of the elements for the project were in place at the time of his death, the synthesis of Donald's working process (Figure 5) and personality must now be drawn from the memories of the close group of friends (Donald Rodney plc), in collaboration with InIVA (the Institute of International Visual Arts).

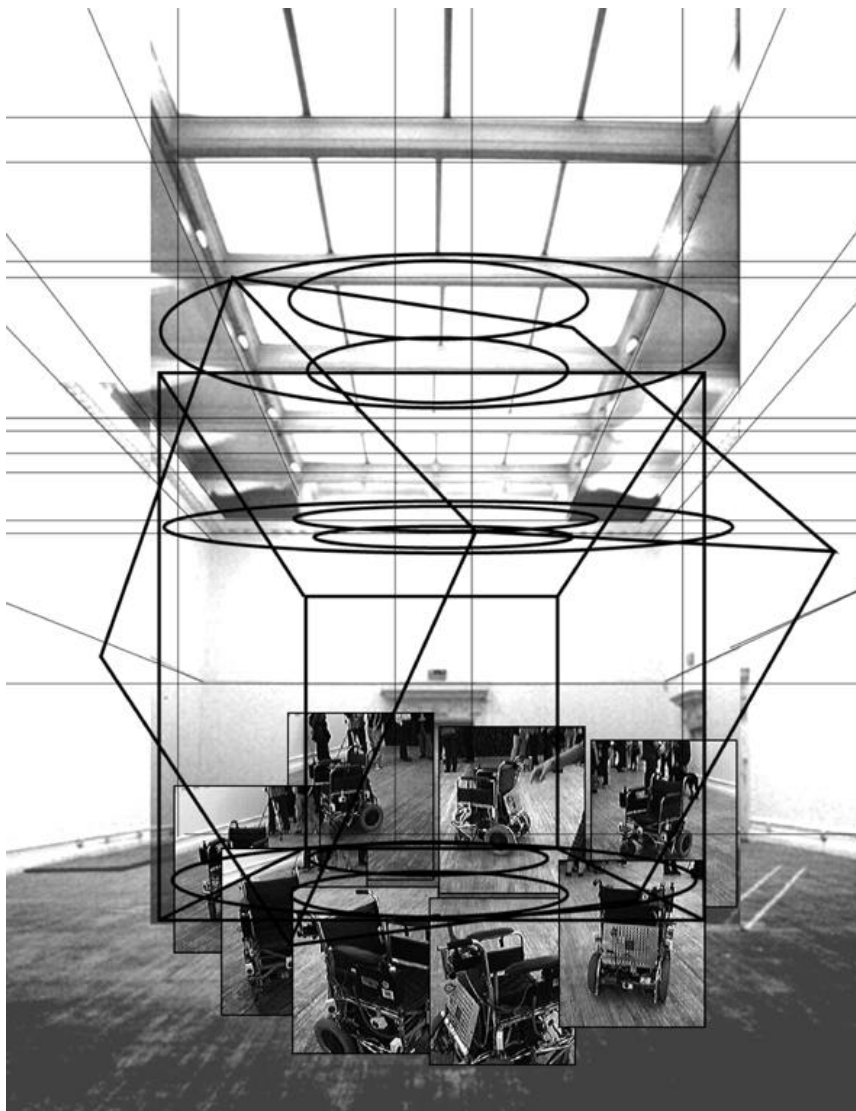
Autoicon was inspired by Jeremy Bentham (1748-1832), ((in)famous for the Panopticon; or the Inspection House (1791)) who left instructions for the construction of his Autoicon. Two hundred and fifty years latter his Autoicon still sits in the corridor at UCL. His body preserved in wax, his head mummified and his vital organs conserved in a pot under his seat. 'Donald Rodney Autoicon' is a memoria technica, this surrogate body, the digital portfolio, provides a framework which challenges Stone's concern about leaving 'behind' the body or "meat".

"The discourse of visionary virtual world builders is rife with images of imaginal bodies, freed from the constraints that flesh imposes. Cyberspace developers foresee a time when they will be able to forget about the body. But it is important to remember that virtual community originates in, and must return to, the physical. No refigured virtual body, no matter how

beautiful, will slow the death of cyberpunk with AIDS. Even in the age of the technosocial subject, life is lived through bodies.”

(Stone, A. R. 1991)

An acute statement considering the digital body is all that is left, bar the memories and the ‘body’ of work (a ‘body’ of work, which begins to fragment without the ‘real’ body to hold it together). Indeed, without the disease the digital body would not exist. Rodney’s ‘Psalms’ (1998) (figure 5) (5), an autonomous wheelchair articulates the presence or lack of presence of his body. Unable to attend his own gallery openings a wheelchair was designed to take his place. Incorporating a neural network, the chair would wander through the gallery intent on pursuing a preordained path. Its interaction with the ‘real world’ continually updated by motion and location sensors. Ignored and continually interrupted in its cycle of the gallery space by visitors viewing other work the system would struggle to maintain its course, pausing and renegotiating. The autonomous system represents the embodiment of the absent body.



*Fig 5: Psalms*

## 10. Logging off:

As the metaphor is left behind, the phantom of A digital Peppers Ghost, an illusion created without the aid of mirrors, still hangs in the air. Before the slow fade to black a streaming body can be glimpsed through the metaphysical fog, enjoying the catharsis and fervour of a networked orgy.

### Notes:

- 1: Very old bad joke, anon.
- 2: Definition of 'Metaphor'. The Collins English Dictionary 2nd Edition 1986, William Collins Sons and Co. Ltd.
- 3: CYBERBABY: 'Digital Body Exchange'. 1987. Vienna: Hochschule für angewandte Kunst. Initiated by Roy Ascott
- 4: Autoicon project can be found @: [www.iniva.org](http://www.iniva.org)
- 5: PSALMS. Autonomous Wheel Chair by Rodney, D., with Bugmann, G. and Phillips, M. In: Nine Night in Eldorado. South London Gallery. October 1997.

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