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# VIRTUAL FUTURES
## CYBEREVOLUTION
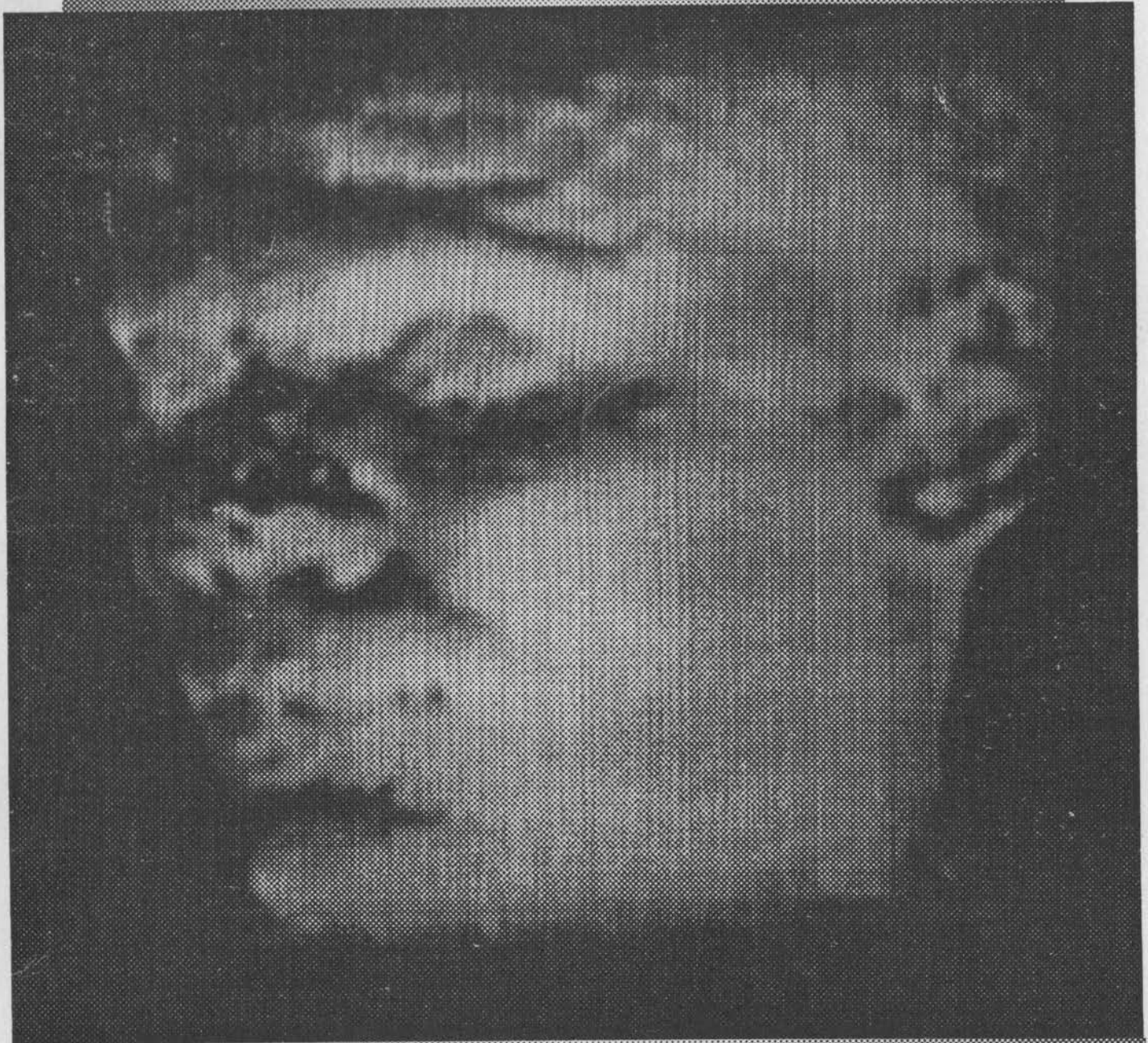
## MAY 26-28
## UNIVERSITY OF WARWICK
## COVENTRY, ENGLAND

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We have gathered you here this weekend to bury the 20th century & begin work on the 21st. We are children of the 21st century & live already in the future unknown, uncovering every day vast new landscapes for exploration. We will not know the results of the tumultuous global changes we are undergoing and creating for a hundred years or more, if we can survive them, but we are less interested in knowledge than in experiencing these changes. "So far philosophers & artists have only interpreted situations; the point now is to transform them, to create situations worthy of our desires." Any post-nietzschean, post-marxist or post-wittgensteinian philosophy is based on experimentation, & so we offer ourselves up to you as your laboratory for the weekend. And you are our lab rats...

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# Virtual Futures 1995 ExtraOrdinary Events

**Red Mercury** (Friday @ 9:00pm - 2:00am): featuring DJs: Rob Maze (Paris), Tom Louichon (Paris), & TechNET (London): rave imagery by: O(rphan) d(rift>) & Carey Young: in Rolf's, ground floor of the Students Union. Tickets available for £3 at the VF reception desk or from the Students' Union.

**i < 1010; - a Computer Mediated Environment** (Saturday & Sunday, in Benefactors' Lounge): by Christopher Jones-Morris & Tessa Elliott (Middlesex U., Centre for Electronic Arts)>>>human/computer communication>>>subverting surveillance & control>>>re-empowering the observed>>>

**Arts Centre Film Talk & Screening** (Saturday @ 1:00pm): (£4.95 / £3.75) Jane Prophet will introduce a screening & discussion of *Long Live the New Flesh & Fuzzy Logic*, featuring the latest in computer animation & machinic art (Survival Research Labs & Stelarc), in the Film Theatre (programmed by *Film & Video Umbrella*) (See p3)

**Free Film Screening** (Saturday @ 12:20pm): *Raw Nerves* (dir. Manuel DeLanda, 1980), a film noir *Anti-Oedipus*, in the Arts Centre Film Theatre (See p. 2)

**Workshop: Theory is a Subset of Action** (Saturday @ 5:30pm): , in Library Room 1, with Matthew Fuller >> **Key words:** 20 steps to hot deterritorialized action>> border zones>> playing with context>> crashing control>> anti-economics, or, if free trade is the interchange of materials minimising imposition by the economy?>> lifestylism & oppositionality>> open your mind, close the university (See p. 23)

**Video Display:** *Unauthorized Access* (a revealing film about the hacker / phreaker underground, by Annaliza Savage (savage@dfw.net), 1994) (all weekend in the Panorama Room)

**Book Displays:** *Routledge Books, The MIT Press, AK Press* (Open all weekend - in the rear of the Panorama Room)

**Virtual Futures Web Nexus:** Open all weekend - in Computing Services Building (See map)

**Featuring CD ROM & WWWeb Displays of:**

- *Anti-rom* (by Andrew Cameron & SASS)
- *I/O/D* #1 & #2 (edited by Matthew Fuller, Colin Green & Simon Pope)
- *TechnoSphere* (by Jane Prophet, Gordon Selley, Julian Saunderson & Andrew Kind)
- *The User Unfriendly Interface* (by Josephine Starrs & Leon Cmielewski)
- ****collapse* (edited by pyudo & pycps)

- **& tours of LambdaMoo & other virtual environments will be given to the uninitiated by GashGirl.**

*Sponsors of VF 95 include:*
*West Midlands Arts Council, Routledge, MIT Press & AK Press*

WEST MIDLANDS ARTS   ROUTLEDGE

# Virtual Futures 1995: Cyberevolution

## May 25-28th @ the University of Warwick, Coventry, England

### Conference Schedule
### Friday (May 26)

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|  |  | Page # |
|---|---|---|
| 10:00am-12:00pm - Registration (Panorama Room) | | |
| 12:00 -1:00 | **Plenary - Arthur & Marilouise Kroker** | 2 |
| 1:00 - 1:20 | Break | |
| 1:20 - 2:40 | **Parallel Session #1 (See page 5 for full listing** of parallels) | 6-9 |
| 2:40 - 3:10 | Break | |
| 3:10 - 5:10 | **Parallel Session #2 (3 papers)** | 9-13 |
| 5:10 - 6:10 | Dinner Break | |
| 6:10 - 7:30 | **Parallel Session #3 (2 papers)** | 13-15 |
| 7:30 - 7:45 | Short break | |
| 7:45 - 8:45 | **Plenary - Manuel DeLanda** | 2 |
| 9:00pm - 2:00am **Red Mercury (Rolf's, Students' Union)** | | |

### Saturday (May 27)

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| 9:00 - 10:00am | Registration (Panorama Room) | |
|---|---|---|
| 10:00 - 11:00 | **Plenary - Peter Lamborn Wilson** | 2 |
| 11:00 - 12:00pm | **Plenary Panel - Schizopolitics** | 2 |
| 12:00 - 1:00 | Lunch | |
| 12:20 - 12:50 | **Arts Centre Film Screening** - *Raw Nerves* | 2 |
| 1:00 - 4:00 | **Arts Centre Film Screening & Talk** - *Long Live the New Flesh & Fuzzy Logic* | 3 |
| 1:00 - 3:40 | **Parallel Session #4 (4 papers)** | 15-20 |
| 3:40 - 4:10 | Break | |
| 4:10 - 6:10 | **Parallel #5 (3 papers)** | 20-25 |
| 6:10 - 7:00 | Dinner Break | |
| 7:00 - 8:15 | **Plenary Panels - Future Music (Panorama) + Virtual Security (S0.21)** | 3 |
| 8:15 - 8:30 | Short Break | |
| 8:30 - 9:45 | **Plenary - Stelarc** | 3 |
| 9:45pm>> | Bar | |

### Sunday (May 28)

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| 9:00 - 10:00am | Registration (Panorama Room) | |
|---|---|---|
| 10:00 - 11:00 | **Plenary - Orlan** | 4 |
| 11:00 - 12:00pm | **Plenary Panels - CyberPunk(Panorama) & Medical Bodies (S0.21)** | 4 |
| 12:00 - 1:00 | Lunch | |
| 1:00 - 2:15 | **Plenary Panel - Replicunts: the future of Cyberfeminism** | 4 |
| 2:15 - 2:45 | Break | |
| 2:45 - 5:25 | **Parallel #6 (3 papers)** | 25-29 |
| 5:25 - 5:45 | Break | |
| 5:45 - 7:15 | **Plenary Discussion - The Future** | 4 |
| 8:00 - 11:00 | Speakers' Dinner - Hylands Hotel | |

# Virtual Futures 1995 Plenary Sessions

**All plenary sessions will be held in the Panorama Room, except where noted.**

### Friday @ 12pm - Plenary - Arthur & Marilouise Kroker: *Hacking the Future*

Arthur and Marilouise Kroker are editors of CTHEORY (ctheory@vax2.concordia.ca) and of the influential CultureTexts series for St. Martin's Press. Arthur Kroker is author of *Spasm, Data Trash, The Possessed Individual* and *The Postmodern Scene* among others. Together they have edited a trilogy of books on feminism and the body: *Body Invaders, The Hysterical Male,* and *The Last Sex.*

*Beyond Nietzsche, Marx and McLuhan, "Hacking the Future" is about a schizoid culture that divides sharply between the technological dynamo of the will to virtuality on the one hand, and a detritus of human remainder that can't be absorbed by digital reality on the other: surplus bodies, surplus labour, surplus nations, and surplus flesh.*
  *Two tendencies then: the will to virtuality from above, and the vicious resentment of retro-fascism from below, with human remainder stuck in-between. Speaking through the medium of '90s culture, it is our thesis that the language of virtuality has now fled the high-tech labs of Silicon Valley, MIT's multi-media lab, and the cyber-grids running from Tokyo to Munich, taking up residence in the violent force-fields of everyday cultural experience: shopping the GAP, visiting Las Vegas, an Arcade Cowboys and Suicide Drive in San Francisco.*

### Friday @ 7:40pm - Plenary - Manuel DeLanda
*The Geology of Morals: A NeoMaterialist Interpretation*

Manuel DeLanda is author of *War in the Age of Intelligent Machines* and the forthcoming *A Thousand Years of Nonlinear History*, as well as being an independent filmaker, computer artist & programmer, & a retired performance artist.

*Deleuze and Guattari's theory of "stratification" will be examined, as well as the complementary theory of "aggregates of consistency", the general term for rhizomatic structures. Examples from geology, biology, economics and linguistics will be discussed, and the two abstract machines behind the creation of strata and self-consistent aggregates explained*

### Saturday @ 10:00am - Plenary - Peter Lamborn Wilson: *Information Wars*

Peter Lamborn Wilson is author of *Scandal: Essays in Islamic Heresy, Sacred Drift: Essays on the Margins of Islam* & editor of *Semiotext(e) SF.*

*Conflict between those who believe in an information economy as transcendence and those who hate it as negative transcendence fails to unveil sufficiently complex theory of information. Net-heads and anti-net-heads are both missing the point. The net is a war zone, and without political consciousness of this imminent reality, the net as area of resistances and freedoms will disappear in about fifteen minutes.*

### Saturday @ 11:00am - Panel - Schizopolitics
Manuel DeLanda, Michael Hardt, Brian Massumi, Alphonso Lingis, Stephen Pfohl, Nick Land (chair).

*If politics is the same word as police, is a micro- or schizopolitics operable that breaks with the history of new-state-in-the-wings opposition & no longer conforms to the demand of virtual power? How do Deleuze & Guattari contribute to the increasingly urgent task of catalyzing an effective anti-fascist antagonism? How to make the earth a body without organs? How to take down power so that it stays down?*

### Saturday @ 12:20pm - Film Screening - *Raw Nerves* (1980, dir. Manuel DeLanda)
### (Arts Centre Film Theatre)

*This film was an attempt to give cinematic expression to some of the ideas developed in Deleuze & Guattari's Anti-Oedipus. In particular, it is the gangster version of the Oedipus complex, with a film-noir Private I playing the role of the conscious subject. His introduction to the law of language does not occur in the cosy world of Daddy-Mommy-Me, but in a public bathroom where the signifier is defined as "the final scribble of a man who had taken his last shit in this world." Formally Raw Nerves makes heavy use of coloured lighting, projected light patterns and continuous use of optical effects, to create a new variation of the look of German Expressionist films.*

### Saturday @ 1pm - Arts Centre Film Talk & Screening (Arts Centre Film Theatre)
Jane Prophet will introduce a screening & discussion of *Long Live the New Flesh & Fuzzy Logic*, programmed by *Film & Video Umbrella (umbrella@cityscape.co.uk).* There will be a charge of £4.95 or £3.75 (concessions) for this screening.

## *Long Live the New Flesh* (75 minutes)

A programme of digital image & cutting-edge techno-performance work which reveals the extent to which the body is being transformed, & may yet be eclipsed, by the influence of new technology. Computer animations by Beriou, Karl Sims, *et al* toy with the fantasy of escaping our earthbound, corporeal nature for a free-floating virtual existence, while the documentary on Survival Research Laboratories & Stelarc usher us into a cold post-human landscape dominated by the figure of the cyborg & a new generation of increasingly autonomous, potentially out-of-control machines. Programme includes: *Tableau d'amour* (Beriou, France 1994), *Flesh* (Patrick Bergel, UK 1994), *Liquid Selves* (Karl Sims, USA 1993), *Scanning at the Speed of Sighs* (Michael Gruchy, Australia, 1994), *A Calculated Forecast of Ultimate Doom* (Leslie Asako Gladsjø/Survival Research Laboratories, USA 1994), plus others.

## *Fuzzy Logic* (75 minutes)

Reflecting the multi-media aspirations of much recent electronic image work, a selection of music-based shorts whose fast-paced, futuristic look derives as much from the cyberdelic pulsebeat of the club scene as from the iconography of the computer game. Features pieces from Butler Brothers, Tony Hill, George Barber, Thomas Napper & Mark Adcock, plus a recently-produced video profile of Ambient Godfather & oblique strategist Brian Eno. Programme includes: *Artificial Light RGB* (Thomas Napper & Mark Adcock, UK 1994), *The City is No Longer Safe* (Butler Brothers, UK 1994), *A .Zoic* (St. John Walker, UK 1994), *Pomme Fritz* (Tony Hill, UK 1994), *One Eno* (Jerome Lefdup & Lari Flash, France 1994), plus others.

## Saturday @ 7:00pm - Panel - Future Music (Panorama Room)

Jason Skeet (TechNET), Kodwo Eshun (*Modern Review, i-D.*), Christophe Fringeli (Praxis Records), Tony Marcus (*i-D.*), Nomex (Nomex Realist Film Units), Dan O'Hara (chair)

*The machinic phylum has been re-coding our minds & bodies through the most violent contortions since analogue synthesizers first colonized the imaginal soundscape. Electronic music is the teacher, to warp Juan Atkins' phrase; techno in its many hybrid forms is training humans to navigate the machinic future. Nevertheless, those who are the ostensible 'producers' of these post-human soundtracks are no longer the progeny of major record labels bent on global domination, but instead are truly integrated into the anonymity of white label culture. These young autonomous individuals are at the forefront of technological phase-change: here we present an opportunity for the uninitiated to witness the interaction between the human & the machine that supports & creates these virtual soundscapes.*

## Saturday @ 7:00pm - Panel - Virtual Security, Net Subversion & State Failure (in room S0.21)

Peter L. Wilson, Manuel DeLanda, James Der Derian, John Browning, Franco Berardi (Bifo), Otto Imken (chair)

*Hit hard by the end of the Cold War, the military-entertainment complex is in the process of decentralizing its traditionally rigid hierarchies, selling its high-tech knowledge to Hollywood, & digitizing its strategies & soldiers. Western warfare has become a video game fought on screens by button-pushers - the war machine is now so automated that a jet pilot pushes buttons to acknowledge the choices already made by the flight computer, not to make an active decision. At the same time, nasty localized guerrilla conflicts are proliferating world-wide: in Chechnya, Bosnia, Kurdistan, Cambodia, Chiapas, Somalia, Rwanda, Algeria, Egypt, Sri Lanka, Indonesia, Kazakhstan, Colombia & in the inner cities of the USA.*

*Terrorist bombs & nerve gas strike ever closer to the hearts of the western powers, & as conventional, biological & massively-destructive weapons become more readily available on the black market, briefcase-sized nuclear bombs & highly toxic nano-weapons are just over the horizon. The reaction of the rich nations has been to ignore the foreign warfare, increase video surveillance of its own populations, & further limit personal freedoms & privacy. But these holding tactics obviously cannot last forever, as shown by the LA Riots (which spread virally to inner cities across the USA), the World Trade Center & Oklahoma bombings, & the massive overkill that was the gulf war. At the same time that warfare has become more mediated & video-enhanced, information-age nomadic war machines have also decentralized & become very personal. The apparent contradictions between geo-politics & micro-politics will focus the debate.*

## Saturday @ 8:30pm - Plenary - Stelarc:     *Erasure Zone: Obsolete, Absent & Invaded Bodies*

Stelarc is a performance artist who is interested in alternate aesthetic strategies. He has used medical, robot & virtual Reality systems to explore, extend & enhance the body's performance parameters. In the past he has acoustically & visually probed the body - having amplified brainwaves, heartbeat, bloodflow & muscle signals & filming the inside of his lungs, stomach & colon. Having defined the limitations of the body, he has developed strategies to augment its capabilities - interfacing the body with prosthetics & computer technologies. He has performed extensively overseas in art events - including new music, dance festivals and experimental theatre. He has interactively performed with his Third Hand, a Virtual Arm, a Virtual Body & a Stomach Sculpture. At present he is developing a touch-screen interface for multiple muscle stimulation - a system to enable the physical actuation & choreography of remote bodies.

*Circadian rhythms subside in the complexity of cyber-systems. Humans increasingly inhabit a ZONE OF ERASURE. Obsolete, absent & invaded bodies proliferate, facilitating THE VANISHING. It is not a "vanishing away" but rather a "vanishing to", where remaining human, being gendered or having a self are no longer meaningful concerns. Bodies need no longer be biologically affirmed but* **electronically erased.** *To be human will no longer be determined by genetic containment but will be reconfigured in circuitry. ELECTRONIC EXTRUSION. Notions of species evolution & gender distinction are remapped and redefined in alternate* **hybridities** *of human-machine. "Spoken tongues"* **subside** *in THE HUM OF THE HYBRID. Consider a body that is structured not as one free agent but whose functions are determined by* **multiple and**

spatially separate agents. *This physically split STIMBOD may have one are gesturing involuntarily (remotely actuated by an unknown transmitter) whilst the other arm is enhanced by an "exoskeleton" to perform with exquisite precision & extreme speed. Its vision would not merely scan externally, but would be augmented & adjusted to a parallel VIRTUALITY which increased in intensity to compensate for the twilight of its real world. Such a body, a STIMBOD would experience its actuality as "neither all-here nor all-there." Its awareness would not be about its integrity; its authenticity would not be grounded in the coherence of its individuality, but rather in its multiplicities of agencies.*

*A system has been developed for THE ACTUATION OF REMOTE BODIES. It structures unexpected interactive possibilities between spatially separated bodies. A TOUCH-SCREEN interface to a multiple-muscle stimulator allows the body's movements to be programmed by touching the muscle sites on the computer model. The sequence of motions can be replayed continuously with its LOOP FUNCTION. As well as choreography by pressing, it is possible to paste sequences together from icons in a library of predetermined movements. The IMPROVISE FUNCTION allows random motions with varying velocities to be "superimposed" onto the programmable ones - which are determined by the number of stimulator channels. The system allows simulation of the programmed movement for analysis & evaluation before transmission to actuate the remote body. At a lower stimulation level, it is a BODY PROMPTING SYSTEM; at a higher level of stimulation, it becomes a BODY ACTUATION SYSTEM. This is conceptualized not as the "remote control" of a body, but rather the means by which a motion is displaced and repositioned elsewhere. To complete a task or condition a skill from ONE BODY TO ANOTHER - IN ANOTHER PLACE. . .*

*The STIMBOD system was completed with the assistance of Troy Innocent at Empire Ridge in Melbourne. STELARC IS A VISUAL ARTS/CRAFT BOARD 1994 FELLOWSHIP RECIPIENT. His artwork is solely represented by the Sherman Galleries in Sydney.*

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## Sunday @ 10:00am - Plenary - Orlan

*Orlan teaches performance & multi-media at the National School of Arts, Dijon. . .Orlan dares to exert a domination on her own body without following any actual standard of plastic surgery. She is transforming her face but her aim is not to attain any ideal beauty, or perfection. For her last surgery in New York she wanted important changes like the bumps she has now on her temples. This performance was broadcast live with the help of the interactive telecommunication equipment in 14 places around the world. . . As usual, Orlan stayed awake during the surgery-performance, while explaining her project, answering questions & comments from the public. Orlan will discuss her work & the issues it raises at Virtual Futures 1995.*

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## Sunday @ 11:00am - Panel - Medical Bodies: Monsters, Surrogates & Cyborgs (in room SO.21)
Orlan, Dr Nick Fox, Dr Alfred Linney, Stelarc, Dr Rachel Armstrong (chair)

*This panel examines the form of the future human in the next millennium and explores the definition and possibilities of the Cyborg. The Cyborg evades definition. A simplistic approach is to see the Cyborg as an organism which appears human but is in some technological way contrived or synthesized.*

*The opening address will be to position the synthetic human as it is now, and reveals that , far from being the Superhuman of CyberPunk predictions, that it is a weakling, crippled both by the initial selection of Cyborg candidates (from the elderly population and the diseased) and by its own internal enemy and friend, the immune system (the Cyborg Skin). This panel aims to address the post-human in a physical realm. Looking at some of the current advances in medicine and drawing from the experiences of researchers and performance artists who raise questions about the elusive identity of the Cyborg.*

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## Sunday @ 11:00am - Panel - Machinic Fictions: Deleting the Future (Panorama Room)
Scott Bukatman, Gwyneth Jones, Istvan Csicsery-Ronay, David Porush, Pat Cadigan, Peter L. Wilson

*If the gap between social reality and science fiction has closed, then cyberpunk is writing reality. Cyberpunk's subterranean influence is felt everywhere--from the underground digital dance floors of techno raves to the insulated corridors of the United States congress. "Cyberspace" has become a pervasive culture icon, yet the established literary institutions--from academia to contemporary dictionaries--staunchly ignore if not blatantly repress such cyberotic works as Naked Lunch, Crash, Gravity's Rainbow, and cyberpunk SciFi itself. This panel examines salient issues surrounding the movement and its oppression: SciFi as critique of the near future; the thematic of control in Anglo-American literature; capitalism as the revolution; and the debate surrounding the apocalyptic vision of early cyberpunk versus the technoptimism of '90s street style.*

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## Sunday @ 1:00pm - Panel - Replicunts: the Future of Cyberfeminism
Liana Borghi, Pat Cadigan, Gwyneth Jones, Francesca da Rimini, Josephine Starrs, Sadie Plant (chair)

*The virtual revolution is also a sexual revolution. All New Gen plays with cyberspace amazons, and the Puppet Mistress weaves webs on the net. What are the virtual futures of gender and sexuality? What happens to masculinity and feminity as the Cyberflesh Girlmonsters come on line? Can patriarchy survive the emergence of cyberspace? Is anything straight in a non-linear world? Does the cyborg have a sex? Is a new sexual politics - or post-politics of some kind - gathering pace in the midst of the digital revolution?*

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## Sunday @ 5:45pm - Panel - The Future

*All are invited for an open forum to discuss the future (& begin planning for Virtual Futures 1996).*

# SCHEDULE OF PARALLEL SESSIONS    (dotted line = break)

| Day/Time | A PANORAMA ROOM | B S0.21 | C LIBRARY 1 | D LIBRARY 2 (Fri) (H0.51)(Sat-Sun) | E F1.07 (Fri) (H0.52) (Sat) |
|---|---|---|---|---|---|
| **FRIDAY #1** | 1A | 1B | 1C | 1D | 1E |
| 1:20 | Prophet | Sengers | Massumi | Chislenko | Watson |
| 2:00 | Cameron | Marchart | Beasley-Murray | Kaufman | Way Out |
| **FRIDAY #2** | 2A | 2B | 2C | 2D | 2E |
| 3:10 | Jones-Morris / Elliott | Amos | Boon | Porush | Teare |
| 3:50 | Starrs | Barton | Haghighi | Cassidy | Heatly |
| 4:30 | Gromala | Ludwig | Fox / Levy | Bukatman | Sondheim |
| **FRIDAY #3** | 3A | 3B | 3C | 3D | 3E |
| 6:10 | Rimini | Der Derian | Broadhurst | Chernaik | Craig |
| 6:50 | Grieve | J. Browning | Flint | Csicsery-Ronay | Beynon / Russ |
| **SATURDAY #4** | 4A | 4B | 4C | 4D | |
| 1:00 | Greenaway | Barber | Haferkamp | Kampis | ----- |
| 1:40 | MacKay / O'Toole | K. Jones | Berardi | Collins | ----- |
| 2:20 | Fisher / Burdsey | Rysenbergen | Imken | Davies | ----- |
| 3:00 | Heath / Metcalf | Griggers | Attias | MacKenzie | ----- |
| **SATURDAY #5** | 5A | 5B | 5C | 5D | 5E |
| 4:10 | Fredd Evans | MacAuley/Lopez | Lingis | Wark | Lewis |
| 4:50 | Alan Moore | Borghi | Welchman | Erickson | Romanos |
| 5:30 | ----- | G. Jones | Fuller | Herzogenrath | Pickering |
| **SUNDAY #6** | 6A | 6B | 6C | 6D | |
| 2:45 | Pfohl | Kim | Beddoes | Mintcheva | ----- |
| 3:25 | TechNET | Chislenko | Charnesky | Cadigan | ----- |
| 4:05 | Zero-K | ----- | Hardt | Head | ----- |
| 4:45 | O(rphan) d(rift>) | ----- | ----- | ----- | ----- |

**Rooms:** On Friday & Saturday, each parallel session will be held in 5 different rooms (A-E), with between 2 & 4 presentations in each room during the session (1-6). Parallel session #6 will be held in 3 rooms only (A-C). Parallel Sessions: 6 sessions (1-6) x Room (A-E) x Paper (1-4) - example = paper 2-C-1 = Marcus Boon.
*Please Note:* Rooms D will change from Library Room 2 on Friday to H0.51 on Saturday; while Room E will change from F1.07 on Friday to H0.52 on Saturday. For exact locations of rooms, see map on back of this programme.

Room A = Panorama Room (Rootes Building, 2nd floor, the main room)
Room B = S0.21 (Social Studies Building (behind the Arts Centre), ground floor (next to the coffee bar)
Room C = Library Room 1 (in Library, ground floor)
Room D = Friday only = Library Room 2 (1st floor of Library)
Room D = Saturday & Sunday only = H0.51 (Humanities Building, ground floor, use entrance nearest Library)
Room E = Friday only = F1.07 (Engineering Building, 1st floor, across the bridge from Library)
Room E = Saturday only = H0.52 (Humanities Building, ground floor, use entrance nearest Library)

# Virtual Futures 1995 Parallel Sessions

**Timing:** Each paper will last for 30 minutes, with 10 minutes for questions, except for some presentations in Room A, which will eschew questions & use the full 40 minutes. In order to get the most out of your weekend, we recommend to everyone that if you are not going to stay for the next paper in the room you are in, leave quickly & quietly at the beginning of the question period so that you will have 10 minutes to get to the next room, since they are spread around campus. If you are a speaker, please try to be in the room of your paper at least 10 minutes before your paper is scheduled, & please do not be offended if people are moving around before or after your paper. There is obviously a lot to see in a short period of time & we will do our best to keep things on time. The bars are in the Students Union, the Arts Centre & the Rootes Building. All parallel times below are PM & subject to change. U. = University.

## Friday May 26

### Virtual Spaces        1A (Panorama Room - 1:20pm - 2:40pm)

**1-A-1: Jane Prophet (U. of Westminster, Video Dept.), Gordon Selley (London College of Printing & Distributive Trades), Julian Saunderson & Andrew Kind (Excess Computer Graphics) (TechnoSphere@cairn.demon.co.uk)** *Get A-Life*

This illustrated presentation introduces TechnoSphere, a virtual 3D environment accessed over the Internet. By using pages on the World Wide Web users can construct artificial life-forms which are added to the evolving database. TechnoSphere is in many ways an exercise in and an exorcism of technophobia. During this introduction we hope to outline the ways that TechnoSphere initiates and challenges this technophobia by discussing the project and some of the critical and technical demands of a complex on-line, dynamic environment. In a way, it is a project whose time has come: with the current explosion of interest in the Net TechnoSphere has become topical. The design team attempts to align a critical theory of the digital image and point out interesting problems surrounding funding and curating virtual artworks in cyberspace. *Get A-Life* is a practitioners eye view of an interdisciplinary project in networked multimedia.

**1-A-2: Andrew Cameron (U. of Westminster, Media Arts: SASS@culture.demon.co.uk):** *Anti-rom*

**The antidote to multi-mediocrity** Anti-rom: is a prototype CD-rom and installation, an art-event and a randomly accessible manifesto for a fresh approach to interactive art practice. Anti-rom is a continuing process of formal experimentation in interactive media - further CD-roms and installations are planned for the summer and autumn of 1995. Anti-rom is an open invitation to artists and critics for ongoing debate and collaboration. Anti-rom offers a radical critique of the poverty of contemporary multimedia in a number of savagely ironic, absurdist and incisive satires. Anti-rom is specifically **against** the ill conceived grafting of point-and-click functions onto traditional linear forms. Anti-rom is **for** the development of a new language of representation, and new modes of spectatorship, within the new apparatus of interactivity. This position is informed by the considerable experience of members of the team within the emerging interactive media industry. The team hopes that Anti-rom will be a catalyst for others to develop interactive art practices beyond the existing paradigm and to explore the radical new opportunities offered by interactive tools. To that end the team intends to distribute Anti-rom as a free Macintosh CD-rom with no copyright restrictions to as wide an audience as possible.

**Ambient Interactivity** Anti-rom offers a new paradigm of interactive media - ambient activities, circular, ritual, without closure, pregnant with sense, hard to sum up. The central issue within interactive representation is a question of meaning - how does interactivity signify? Anti-rom is a response to this question and a step in the development of new strategies of art practice in interactive media. The paradox is that this essentially modernist project - the search for a language appropriate to the medium - is conducted with that quintessentially post-modern device, the digital computer. Anti-rom recognizes that interactivity involves specific tools and specific techniques and that these must be used appropriately and with a sense of their real potential. Technology here is not avoided or fetishized, but confronted and put to work.

Anti-rom has been created by **SASS**: Andy Cameron, Rob Le Quesne, Sophie Pendrell, Luke Pendrell, Andy Polaine, Tomas Roope and Joe Stephenson. Anti-rom is an open collaboration between this core production team and a wider group of photographers, video makers, musicians, writers and other artists who are concerned to engage with the real creative possibilities of a new medium. Most importantly of all, Anti-rom encourages a productive collaboration between audience and artwork in which the distinction between producer and spectator is blurred.

## Schizoldentities

**1-B-1: Phoebe Sengers (Carnegie Mellon U., Dept. of Computer Science / Program in Literary & Cultural Theory: phoebe@cs.cmu.edu):** *Fabricated Subjects: Reification, Schizophrenia, & Artificial Intelligence*

"Our society produces schizos the same way it produces Prell shampoo or Ford cars." (*Anti-Oedipus*) They are churned out day by day by the techniques of mass production that underlie Artificial Intelligence (AI). AI's practices for scientifically engineering subjectivity are based on an analytic methodology that finds its roots in industrialization. Industrialization leads to reification leads to schizophrenia, in this case a schizophrenia in the artificial `agents' AI produces, whose fragmentation researchers recognize and have a substantial investment in solving.

Artificial Life (ALife) in particular attempts to get beyond this schizophrenia by avoiding some of the positivist claims of traditional AI; this manifests itself in its practices as an investment in complex systems theory and cybernetics. But even this investment does not save its agents from an acknowledged schizophrenia; the under-the-table return to naive objectivity that systems theory often brings with it leads ALife back to the same methodological mistake: scientifically engineering subjectivity through the analytic method.

Fabricated subjects are fractured subjects, and no injection of straight science will fix them where they are broken. Since schizophrenia is the result of an analytic methodology that lies at the core of science, researchers' desires to build agents that do not manifest broad symptoms of schizophrenia can be harnessed to change the mythology of scientific objectivity that unthinkingly permeates much of the engineering work in AI and ALife. I propose alternative agent construction techniques, hostile to straightforward analysis and motivated by poststructuralist subjectivity. Such techniques can lead to a new, anti-scientistic and creative methodology for AI.

**1-B-2: Oliver Marchart (U. of Essex, Centre for Theoretical Studies: a6102gbl@helios.edvz.univie.ac.at)**
*From Sociotronics to Technopolitics: The Making & Subversion of Electronic Identities*

Underlying this somewhat strange title is the observation of the simultaneous return of many utopian concepts and ideas of political philosophers concerning the question of society and community - or what I call the sociotronics of Cyberspace. An example: Whilst a Rousseauian faction seeks to protect the matrix as one would protect an untouched rural happyland, there is also a Liberal faction seeking to institutionalize rights (Cyberrights Now), which presupposes either a Lockean right to resist or a Hobbesian state of nature which has to be shaped by an electronic social contract.

Another example, now concerning the occidental imaginary and the repetitive projection of mythemes on the white surface of new continents. In this sense it is perfectly clear that the matrix represents a new America: an always receding horizon/frontier which has to be discovered and at the same time protected. A new yet unapproachable continent. Hence, it won't surprise that we can observe the repetition of social roles, such as that of the Cowboy (the term Gibson uses in his novels for his Cyberpunks), Anarchists and Terrorists (Hackers, Cypherpunks), Liberals (the EFF), Indians (maybe us - after the conquistadores have taken over) or the United States Cavalry (NSA). The matrix serves as a screen not for the psychotic obsessions of some individuals but for our occidental imaginary, which has always been projecting its own myths into the new discovered continents.

The method/theory behind this part of the investigation is to a certain extent Lacanian, since Psychoanalysis allows us to look at these mechanisms of transference. In the second part I will refer to Deleuze, Butler, Laclau, Spivak, hooks etc. This part is concerned with the subversion of existing identities. The main problematic here is how to translate the discussions on strategic identity, parodic repetition, radical difference and so on into the sociotronics of cyberspace. At least one thing is clear: What is needed (as one task of an e-subversive program or manifesto) is to overcome sociotronics and arrive at technopolitics; in other words the reactualization of the political potential of sedimented social myths and identities.

## Virtual Post-Politics

**1-C-1: Brian Massumi (McGill U., Graduate Program in Communications/U. of Queensland, English Dept: 73140.3206@compuserve.com):** *Politics without Possibility (History without Limits)*

"It is not that the possible comes to be realized; rather, it is the real that makes itself possible." With this formula French philosopher Henri Bergson rejects wholesale a philosophical presupposition that is no less ingrained in contemporary cultural theory than in common sense thinking about change: that alternative possibilities pre-exist the real, and that freedom is a choice, for the future, of one possibility from among the alternatives. Bergson's rejection of the classical concept of possibility has the opposite intent from the one that might be expected from a cursory reading. The intent is not to close off the future, to enclose us in our present. On the contrary, it is the doctrine of the possible that relies on closure: for a set of alternative possibilities to coexist in the present for the future, they have to have been determined as possibilities by a past structure, which lives on through the realization of one of its permutations. In other words, the concept of possibility functions against a background of determination. It boxes us in our past, in the form of a limitative set of already-possible permutations in relation to which we can do nothing more active than choose. The doctrine of possibility attempts to add freedom to a bedrock of determination.

Bergson denies possibility in order to bulldoze the bedrock, for the sprouts of invention. In his view, the possible arises from the real, from its emergence, always new and unforeseeable. It is this self-organizing emergence that creates its own possibility, retroactively, in a kind of temporal backwash (what Bergson calls the "retrograde movement of truth"). The emergence of the new, of which possibility is a retrospective reflection, is an openness more radical than choice. Bergson calls that inventive indetermination the "virtual." This paper explores the consequences of the Bergsonian critique of possibility for contemporary cultural theory, and in particular for identity politics and its aftermath. Its central concern is to distinguish the

virtual from the possible, and to free social constructivism from its foundation in theories of determination. Chaos theory will be used to show that the concept of objective indeterminacy is not necessarily inconsistent either with autonomy or operations of power.

**1-C-2: Jon Beasley-Murray (Duke U., Literature Program: jpb8@acpub.duke.edu)**
*Deleuze, Guattari & the Human Security System*

This paper starts from the premise that Michel Foucault was correct to term Deleuze and Guattari's *Anti-Oedipus* "a book of ethics... an Introduction to the Non-Fascist Life" and that thus their thought has to be historicized, read within a trajectory of thought concerning the political role of the intellectual. Moreover, I argue that in the slippage between the term "ethics" and the delineation of their project as "non-fascism" we see the function of *Capitalism and Schizophrenia* to be the articulation of a politics based upon ethics rather than upon morality–as Deleuze defines these terms in his reading of Spinoza.     If, therefore, Deleuze's more strictly "philosophical" work outlines the space for an ethical project of immanent affirmation (as in Michael Hardt's reading of Deleuze's early work), in his collaboration with Guattari this project is re-situated within a problematic defined by the historical experience of fascism, to effect the politicization of philosophy. At the same time, however, Deleuze and Guattari manifest a pronounced distaste for the political, and fascism is seen not as an aberration but as inherent to current forms of political organization.

Some have taken this position at face value as either apoliticism or antipoliticism. While the traditional Left criticizes them for a supposed "evasion" of politics, others celebrate *Anti-Oedipus* as an injunction against any form of political organization. In contrast to either of these critiques, however, I argue that *Capitalism and Schizophrenia* has to be re-inserted into debates surrounding the historical crisis of the political. In this context, what is under attack is a representational politics that mobilizes dependent subjectivities–either in fascism, or by political movements premised on the party or the vanguard intellectual as a dialectical counter-mobilization. On the other hand, Deleuze and Guattari see the possibility of the irruption of a new form of politics, new forms of organization, both as positive potential in May '68 or the Italian New Left, and correlatively as a continuation of an "interminable resistance" to fascism.

Those who read Deleuze and Guattari as an evacuation of the political, then, make the dual mistake of: first, ignoring their numerous (and, in *A Thousand Plateaus*, increased) calls for caution, premised upon historical analysis of nazism; and second, mistaking social and philosophical affirmation for a critique of politics which would, in any event, remain merely on the level of Hegelian negation. Indeed, *Capitalism and Schizophrenia* is structured around the search for a response to fascism, such that the transition (and clearest difference) between the two volumes is in the discovery that the most extreme deterritorialization may return upon itself as a line of death. The anxiety this induces for Deleuze and Guattari is, I argue, in part also a function of their unresolved analysis of the role of the intellectual, and an uncertain relation to the populist sloganeering that would seem almost inevitably to accompany deterritorialization, whether formulated as "More perversion! More artifice!" or "Death to the Human Security System!"

# Virtual & Enhanced Reality                    1D (Library Room 2, 1:20 - 2:40)

**1-D-1: Alexander Chislenko (Cambridge, USA: sasha1@netcom.com)**
*Enhanced Reality and future of perception*

This speech discusses the implications of augmentation of human perceptional mechanisms with advanced information technologies, including Virtual Reality, Telepresence and active information filtering agents. The future achievements of these technologies will cause dramatic changes in our perceptions of the world and ourselves, and will make individual worldviews at the same time more diverse and more coherent.

**1-D-2: Eleanor Kaufman (Duke U. / Paris)**
*Living Virtually in a Cluttered House*

This essay regards the virtuality of stuff, or more precisely, the relation between stuff density and thought density. There is a sense in which the "virtual" represents a sort of pure immanence, an intensity that is all the more real by the very fact of its not being precisely "there." Here, I look at the reverse formulation: density of objects that coexist in a bountiful vacuity of thought-space. I focus on spaces with a high object density per unit of space, namely, the third floor of a certain library, a McDonalds table top, and finally a small cluttered house that can only be traversed by the inhabitants who know its secret code. I argue that such super-dense object configurations, at least for the one that writes, are also a dissipative thought-space; that is, expansive thought actually–or virtually–resides within high-order object clutter, making room, as it were, for a sort of dissipative thought-event.

This position substantially revises my "Dissipation and the Event," in which I propose that, within the nineteenth- and twentieth-century French literary and philosophical traditions, dissipative thought-events–the materiality of repression (Sands Lelia), thought moving a table (Balzac's Louis Lambert), spontaneous combustion (Zola's Doctor Pascal), etc.–reach their apogee around the thought-event that is marked by a high-order configuration of thinkers in the mid-twentieth century (in particular Bataille, Blanchot, Deleuze, Foucault, and Klossowski and the thought-event of their laudatory essays about each other). Here, however, I take this line of reasoning in another direction, into the middle spaces of the American Midwest, the location of the dense and cluttered object spaces in question. Essentially, I suggest that the dense solitude of bumping up against object-clutter–negotiating one's proximity to stuff itself, letting stuff negotiate you–forms a virtual space within matter that is also a space of ethical thought.

# Pleasure & Pronoia

**1-E-1: Sean Watson (U. of the West of England, Faculty of Economics and Social Science: sm-watson@wpg.uwe.ac.uk):** *The Strange Attractor of Enjoyment*

This paper examines the analysis of the affective dimension of the social bond found in the work of Gilles Deleuze, Felix Guattari, William Burroughs and Slavoj Zizek. It describes Deleuze and Guattari's radical politics of difference, nomadism, and `becoming minor'. This is presented in its relation to the context of their analysis of the `human' as an island of `state/oedipal' stasis in a sea of `schizophrenic' capitalist flux. William Burroughs' text is presented as Deleuzian `war machine', as neurological device, scrambler of body/desire codings, exploder of cultural pathways. Burroughs attempts to take us out of `time', out of stasis, into yet another neo-Nietzschean vision of `phase-change' to a new species of wo/man as embracer of `becoming'. So these are the real stakes in the radical politics of difference. Not the "pure discursive effect" but the structuring of our "Enjoyment" as Zizek would have it. What really repels us about the `other' is not that they have different values, or beliefs, or at least not that alone. What really bothers us is "the smell of their food, their `noisy' songs and dances, their strange manners" the particular mode in which their body/desire is shaped into structures of Enjoyment. This "Thing", Zizek writes of, (equivalent to Deleuze and Guattari's "anti-production") has all of the qualities of the `strange attractor'. No individual cultural manifestation or collection of manifestations will make possible prediction of the next. Neither is it completely random however. Overall the many individual cultural manifestations appear drawn to a point or curve in `phase-space', the structure of Enjoyment, a `strange attractor' perhaps. A non-linear mathematics of Enjoyment?

**1-E-2: the Way Collective (Newport: eschaton@wayout.demon.co.uk)**
*Pronoia and the Jilted Generation - A Technomadic Manifesto*

This paper explores the use of communication technology arising from the 'Rave' movement. As the last generation of the 20th Century, we are left with the job of cleaning up the mess of a hundred years of consumerist culture, as well as having to exist in a hegemonic society. We must find new ways of dealing with the dichotomy of technology. This paper is a manifesto proposing a Technomadic existence - combining Alternative Technology, Remote Communication, Memetics, Eco-Awareness and Interactive Art. We will be opening up a discussion after the talk and invite interested parties to become involved in the creation of a Technomadic Research Centre in the U.K.

# Pain, Paranoia & Constant Surveillance

**2-A-1: Tessa Elliott & Christopher Jones-Morris (Middlesex U., The Centre for Electronic Arts)**
*i < 1010; - a computer-mediated environment*

i<1010; is a development of the project *for(i=0001;1<=1001;i++);* which was initiated at the Camerawork gallery in January & February 1995. *for(i=0001;1<=1001;i++);* explored the notion of "interactivity" & what constitutes "art" in the current technological age. At the outset of the exhibition the installation contained no images or sounds. It was constructed & conceived as a framework for interaction, an orchestration for collaboration, an exploration of representation within a computer mediated environment.

Computer technology was utilised to enable diverse groups of participants, ranging from school children to architects, to input images, sounds & interactive structures into the installation. The animated works produced ranged from samples of "skipping games & playground chants" to "bodies making letter forms & their related phonetic sounds". During the period of the residency, as these works accumulated, they could be activated during the day by movement within the gallery space. In the evening they were projected onto the glass frontage of the gallery, forming a "reactive" focal plane for passers-by, whose movement was monitored by a street surveillance camera.

Towards the end of the residency the works created by the participants were placed into an "interactive" structure. To generate this structure we encoded the compositional technique of the composer Andrew Deakin & used "perspectival inversion" to allow the video detection of movement to project a three dimensional sound space. The dynamic nature of this complex structure, which conceptually permeated the gallery, ensured uncertainty & improvisation, as it was made to resound with visual & acoustic traces of physical presence. This was exemplified by Rebecca Skelton's performance in the space where the dichotomous dialogue of the human & machine was explored by poignant movements of contorted control & surrender. 1<1010; represents a continuation of our collaboration with Rebecca Skelton & Andrea Deakin & is a work in progress towards our forthcoming performance, i=1010; at Lillian Baylis Theatre in June 1995.

**2-A-2: Josephine Starrs (VNS Matrix: 9401489L@levels.unisa.edu.au)**
*Power, Paranoia & User Friendliness in the Age of Information Fetishism*

The most interesting thing about computer interactive works is play. I play with notions of technophilia, technophobia and the use of new technologies by the system. Every time we use credit cards, enter a pin number, make a telephone call, use the internet or fill out a questionnaire, our activities are recorded in cyberspace. Our experiences, especially in the Western world, are increasingly mediated by new technologies affecting our sense of ourselves and the mechanisms by which the rules of our sexuality are learned.

We are constantly handing over information about ourselves to the point were it reinforces our identity to do so. I am digitised, therefore I am. The more we surrender information the more we are complicit in our own surveillance and control. *The User Unfriendly Interface*, an interactive multimedia computer piece being created by myself and Leon Cmielewski, turns the concept of a friendly interface on its head, going out of its way to be rude to the user. Within the work references are made

to: personality testing, dating services, data base abuse, Pavlovian computer users and our relationship to technology. It is a humorous look at power in the new information age, conspiracy theories, virtual reality, cyberculture in general.

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**2-A-3: Diana Gromala (U. of Washington, Director of New Media Research Lab: gromala@u.washington.edu)**
*The Instrumentality of Pain in Virtual Bodies*

This paper will explore two sets of virtual environments – *Virtual Bodies* and NBC's virtual environments as used in the OJ Simpson trial – as sites of continual contestation and negotiation among social, political, economic, and technological forces; as phenomena though which notions of subjectivity flow and collide; and as demonstrations of the incommensurability of pain and terror. The *Virtual Bodies* project was an exploration of my experience of chronic pain and its confluence with materiality, the immaterial, and dematerialized notions of corporeal transcendence. This immersive, interactive virtual environment is comprised of digital data obtained from technologies which are able to extend our perception to apprehend previously inaccessible properties of our bodies, from x-rays, MRIs, and sonograms to electron microscopy, invasive microvideography, and algorithmic interpretations which transform data from bodily sounds, heat, and "measurable" pain sensitivities into malleable visual and auratic forms. This virtual body is of enormous scale, and exists in a state of constant decay and reformation. Further, the virtual body becomes "book" as it is overwritten with texts of desire, Bataille-inspired re-embodiments of *Eros* and *Thanatos* swirling about splintered and reconfigured forms and notions of a body in pain.

Where *Virtual Bodies* was performed at a series of Art and Technology symposia, NBC broadcast a different set of virtual environments during the OJ Simpson trial. While these exist in radically different contexts, they both share an ability to throw assumptions of subjectivity into disarray. As Michele Kendrick suggests, underlying discourses that strive to redefine relationships between technology and subjectivity are assumptions that a stable subjectivity exists intact, prior to experiences of fluid and mutable "disembodiment." This sense of disembodiment, precipitated by experiential aspects of emergent technologies, is often claimed or assumed to be liberatory. In both cases, notions of subjectivities are splintered and reconfigured in the creation, use, dissemination, and interpretation of virtual environments.

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# BioComputing & Self-Reproducing Viruses     2B (SO.21 - 3:10 - 5:10)

**2-B-1: Martyn Amos (U. of Warwick, Parallel Computation Group, Dept. of Computer Science: Martyn.Amos@dcs.warwick.ac.uk)**
*Biocomputation: Harnessing the Double Helix*

Scientists have, for decades, successfully applied models of biological processes to the solution of "real-world" problems. Genetic Algorithms simulate Darwinian evolution, providing solutions to intricate mathematical problems through the sieve of natural selection. However, a large number of problems remain stubbornly impenetrable, resisting attack from even the fastest supercomputers. Some scientists believe that the time has come to try a different approach, computing not with silicon, but with the substrate of life – DNA. By phrasing mathematical questions in the language of genes we can now find the proverbial needle in an astronomically large haystack. Using DNA not as a passive messenger but as a industrious molecular computer could radically alter our traditional idea of computation. Biocomputers could be the basis of a new computing revolution, a "DNA Valley" forming to rival its inorganic counterpart.

Modern supercomputers are capable of executing around a trillion operations a second. Molecular computers could potentially execute more than a *thousand* trillion operations every second, as well as being a billion times more energy-efficient and requiring a trillionth of the space needed by existing storage media. In this paper I describe the mechanics of biocomputation and consider some potential applications, before concluding with a discussion of both the exciting and disturbing aspects of this emerging technology.

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**2-B-2: Will Barton (U. of Warwick, Dept. of Psychology)**
*Letting Your Self Go: Hybrid Intelligence, Shared Cognitive Space & Posthuman Desire*

The paper broods upon disparate issues of the biologic and machinic phyla. Shared cognitive space radicalises the concept of person-machine communication. A redefinition of the scientific nightmare is impelled; comprehensive, non-reductive & counter-Cartesian in methodology. Hybrid Intelligence Theory (Naplatanoff, Dimitrova & Dimov, 1991) postulates a new machinic discourse. AI theory illuminates and is illuminated by HI theory but is not determinative of its efficacy. The philosophical issues raised by HI challenge the limits of self and identity and the boundaries of intelligence. The psychological issues are principally but not exclusively related to cognition. The processes of thought and computation combine into a single cognitive - HI - entity.

Early maps of the ecology of information were drawn by McLuhan (1964) and refined by Baudrillard (1988). Complex ecologies of information have been addressed by Checkland (1984). One or more persons working in conjunction with one or more machines generate an HI, which may be self-comprehending but the persons them-selves, divorced from the machine will not understand the HI in its entirety, unleashing unpredictable posthuman desires. DeLanda (1994) delineates a blurring of the distinction between human and machine, opening up new roads and new dangers. HI praxis will seek out those dangers and explore those roads, plunging headlong across the frontier of the human self to the apotheosis of the cyberian.

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**2-B-3: Mark Ludwig (American Eagle Publications, Arizona, USA: ameagle@mcimail.com)**
*Virtual Catastrophe: Will Self-Reproducing Software Rule the World?*

The ability of Darwinian computer viruses to evolve means to fend off attacks by anti-virus programs has been demonstrated. Furthermore, the ability of self-reproducing computer software to evolve millions of generations in the space of minutes has

been demonstrated. The author examines possible future scenarios for self-reproducing software, and discusses what can be done now to avoid a virtual catastrophe in which self-reproducing code makes large scale interconnectivity impossible. Both basic research in Darwinian evolution, and a deeper understanding of the interplay between operating systems and self-reproduction are necessary to reap the benefits of self-reproducing code while avoiding its dangers.

## From the Cellular to the Body without Organs          2C (Library Room 2, 3:10 - 5:10)

**2-C-1: Marcus Boon (New York U., Dept. of Comparative Literature: boonm@acfcluster.nyu.edu)**
*Zero Intensity: Comments on the Biology of Cell Death*

In 1858, a few years after the period Foucault covers in *Naissance de la clinique,* the German pathologist and politician Rudolf Virchow first suggested the study of cells would form the basis of a medical "theory of life" and "the science of pathology." Since that time, the *in vitro* and *in vivo* study of cells has provided a model for a remarkable range of theories and speculations on the nature of life and the units by which it is thought to be constituted. In this presentation, I describe some of the most important experimental observations on this topic, and the way these observations were based upon and provided models for ideas of what a subject, an organism, a society and a culture could or should be.

In particular, I follow the evolution of belief in the cell's sovereignty or lack thereof over its own life and death, and how this is characterized in terms of an endogenous death drive, an immortality program, an internal or external suicide program or (presently) by a complex system of dynamics aimed at controlling broader cell populations. By framing these remarks within the context of the Deleuzian critique of subjectivity, and of certain remarks by Bataille on the subject of death, I situate the various ways in which scientists have characterized cell death within historically specific general economies and offer some suggestions as to possible future conceptualizations of the unit of organic life and its life and death.

**2-C-2: Mani Haghighi (U. of Guelph, Dept. of Philosophy: msalemha@uoguelph.ca)**
*Haptic Visionaries: Resonation as Meta-mimesis*

This paper investigates possible convergences between two Deleuzean themes: those of "jamming," as presented in the opening chapter of *Cinema 2,* and "clarity," which concludes Deleuze's book on the work of Francis Bacon. Jamming implies a sudden breakdown of the sensory-motor schemata. It generates what Deleuze calls a pure optical-sound image: an image of the thing itself, and of time, free of metaphor. Clarity, as presented in the closing chapter of *The Logic of Sensation,* appears to be the outcome of this breakdown; it implies the emergence of a new conceptual assemblage which does not resemble the predetermined, broken-down model, but which resonates with it in new and unexpected ways. This novel conception of resonance speaks of a "more profound, non-figurative resemblance:" a meta-mimesis which at once escapes, and makes possible, the idea of communication.

Understanding, therefore, is available only as a "vision," something that "no longer has to be justified, for better or worse." Such a vision allows Rossellini's factory workers to become imprisoned convicts (*Cinema 2,* Ch. 1) and Bacon's bird to turn into a huge umbrella, crowning raw meat (*The Logic of Sensation,* Ch. 17). For Deleuze, this vision presents the problem of a pure logic: how to pass from the possibility of fact to the fact itself? Searching for the roots of this problem, the paper briefly considers the conception of "breakdown" in Kant's analytic of the sublime and in Heidegger's work on technology. In conclusion, the process of mimetic signification, as well as the long-faced, post-structuralist critique it faces today, are dismissed in favour of the joy of resonation.

**2-C-3: Nick Fox & Phil Levy (U. of Sheffield, Medical School: N.J.Fox@sheffield.ac.uk & P.Levy@sheffield.ac.uk)**
*De-territorializing the Body without Organs: postmodern ethics & the virtual community*

The postmodern body of Deleuze and Guattari is a philosophical surface, the Body-without-Organs (BwO), which is contested by discourse and by positive desire. The latter is, in part, the desire of the other: a positive investment which can enable the BwO to break free from discourse, creating (if only for a moment) what they call a 'nomad subject'. Elsewhere (Fox 1993) I have explored the connections between this conceptualization and Cixous' notion of an empowering Gift (generosity, trust, love) which enables a person to become other. These ideas are important in the generation of a postmodern ethics, based on a celebration of otherness. The mood of this postmodern ethics is one of 'grieving delight' (White 1991): a grief for injustice and a delight in the affirmation of difference. The focus of this postmodern ethics is the BwO, the objective: to blast it free from discourse and to facilitate resistance. Virtuality de-territorializes one crucial discourse of the body: the Body-with-Organs (the 'organism' to use Deleuze and Guattari's (1988: 158) term. Freed from physical space and time, the virtual body is capable of wandering nomadically, no longer subjected to discourses of the other (up to a point). This paper looks at this de-territorialization, and some possible re-territorializations of the virtual self, in relation to virtual communities enabled by the Internet.

## Cyberotics, Panoptics & Telepathy          2D (Library Room 2, 3:10 - 5:10)

**2-D-1: David Porush (Rensselear Polytechnic Institute, Dept. of English: porusd@rpi.edu)**
*TELEPATHIES: Molly Tweaks Her Nipple, Case Jumps.*

Increasing the (speed X bandwidth) of our communication means enabling the transmission of more information with more fidelity across more of our senses. Treating the history of commtech evolution as lying on the vector of evolving telepathy - feeding the urge for intimacy - gives us a way to understand emergent recongfigurations of our relationship to the body of the Other (Stelarc-wise) and the evocation of new gods, new idolatries, a new metaphysics. I'll explore these intimations in the context of Porush's Law: *The advent of the human brain on the stage of the universe makes nature obsolete.*

**2-D-2: Eric Cassidy (U. of Warwick, Dept. of Philosophy: pyrbe@snow.csv.warwick.ac.uk)**
*2025: Core-War*

Social reality is science fiction.
*Gravity's Rainbow* downloads into literary history with the k-wave crash of 1973, predicting imminent apocalypse–in 2025.

Surfing the schizophrenia of Henry Adams, Pynchon implodes with Deleuze in producing waves of machinic history that track the evolution of capitalism and its technological lineages. Accessing the archives of Robot Historians like Manuel DeLanda, VNS Matrix, Stelarc, and maybe even Hakim Bey, this paper explores viral materialist markets and the erosion of the State. Intended as an act of 'poetic terrorism' within the rotting husk of the academic apparatus, the paper ends with a detailed analysis of Pynchon's magnum opus, *2025 Core-War*.

**2-D-3: Scott Bukatman (U. of New Mexico, Media Arts Program: xbody@unm.edu)**
*The Artificial Infinite: Special Effects & Virtual Futures*

In the eighteenth and nineteenth centuries, as new technologies and social formations displaced the haptic in favour of the visual as a source of knowledge about an increasingly complicated set of lived realities, popular culture offered a surfeit of spectacular forms that compensated for the lack of touch with what might be termed an hyperbole of the visible. Visual spectacle provided a reassurance in the form of a panoptic power (minus the inscribed and very real power-relations described by Foucault) - the human subject was, after all, capable of perceiving and comprehending these new conditions through the projection of an almost omnipotent gaze out into the represented world.

The cosmic displays of the science fiction film, produced by technologically advanced optical effects, surely derive from a similar drive for scopic mastery. The overwhelming perceptual power granted by these panoramic displays addressed the perceived loss of cognitive power experienced by the subject in an increasingly technologized world. In acknowledging anxiety while ultimately producing a sense of cognitive mastery, these entertainments frequently evoked the rhetorical figures of the sublime.

In SF effects sequences, the sublime is elicited around a massive technological object (or environment): a Stargate (*2001*), a mothership (*CE3K*), an alien object (*Star Trek*), a city (*Blade Runner*). It is technology that inspires the sensations characteristic of sublimity, therefore it is technology that alludes to the limits of human definition and comprehension. The special effect unfolds before the human gaze and becomes susceptible to an encompassing control that inheres in the very act of seeing. The effects sequences by Douglas Trumbull go further than other effects work in their ambivalence: they are neither unabashedly celebratory (*Star Wars*) nor darkly condemning (*Alien*). As with the panoramas and other displays of the last two hundred years, special effects are rooted in an ambivalent relation to new technologies, and like those other forms, these sequences are always dependent upon new technologies for their very effect(s).

My presentation will describe the complex experience of special effects - or, perhaps we should refer to an historically specific experience of technological complexity. Effects will be understood as crucial to how we map ourselves into a thoroughly technologized topography. Widescreen special effects constitute an immersive, technological environment occupying an historical position between the utopian fictions of the 19th century and the virtual fantasies of cyberspatial disembodiment.

# Virtual Connections                    2E (Room F1.07, 3:10 - 5:10)

**2-E-1: Genet Teare (Cyberia, London: gene@easynet.co.uk)**
*The culture of the internet*

The internet suggests a very different society, based on an aspiration where national boundaries do not hold sway, where the nation state is less relevant as the means through which individuals experience reality. 'We live in a more global society' has become a commonplace. Surprisingly, though, in the 90s, this is expressed in fear. This lack of optimism is shown by the focus on scandal and crime in the papers. When it comes to politics no-one expresses a world view. Single or local issues dominate. Recognisable too are the fears expressed about public spaces, with mistrust of people's motivations the reaction, and increased surveillance posed as the solution. Does the internet with all it promises challenge this trend? How do we understand the internet as a tool that helps to shape our social expectations and lived reality? Come and air your views in the 'real Cyberia'.

**2-E-2: Richard Heatly (Newport School of Art & Design, Gwent College of Higher Education, Cultural & Media Studies):** *Virtual Discourses*

An important focus of contemporary engagement with new computer-based technologies has been upon the interface between the human user and the system, particularly in the form of 'virtual reality.' Speculation and comment about the utopian and dystopian nature of these technologies has also focused on the apparent potential of the 'virtual spaces' created with the systems themselves, particularly when linked to form networks which are then interconnected by higher level networks.

This paper will examine a range of writing, talk and action surrounding virtual reality, treated as three separate but overlapping spheres of discourse: users, myths and critics. The contemporary material discussed includes writings and interviews given by practitioners and users of the technology, media comment and speculation of various forms including films, computer games and popular journalism, and a variety of critical writings about digital technologies and VCR in particular. This emerging discourse of a new technology is summarised and placed in the context of earlier historical views of technology, particularly as they have emerged with predominantly utopian and dystopian analyses of past 'new technologies.'

The aim is to find a position from which to view and understand the active construction of fervent expectations and fears around such technological innovations.

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### 2-E-3: Alan Sondheim (432 Dean Street, Brooklyn, NY, 11217, USA: 1-718-857-3671: sondheim@panix.com)
*Lag, What you Hear Later, the Splayed Body*

I write myself into existence and so I'm here for you.
I write myself out of existence, too bad.
Third sex and the ascii unconscious: let me be-cum you.
I'm imagining you listening to me.
I'm imagining you whispering to me, whispering to me.
I'm no longer a guest, I whisper back to you. When I'm done, I'll disappear forever.
Flattened against the screen, I recognize you, reflected cunt shunted against the words.

But then. But then there's a forest; Heidegger weeps in the forest. Heidegger waits and waits, no one cums along the lonely path. He crosses the bridges, the routers, the backbones through the landscape of the Net. He writes his first post, about violation fabric.

I wander through his post. I'm the vowel, the umlaut, the dia/critical mark holding everything together. I'm always begging. My words spew on the screen. Your response is an emission; the stream rises from the forest, floods everything in its /path/home/sondheim. No reply, I rm myself. What the shell closes, cuts down, is the future. My last words: I am your future.

## Object-Oriented Desires                                3A (Panorama, 6:10 - 7:30)

### 3-A-1: Francesca da Rimini (VNS Matrix: gashgirl@apanix.apana.org.au)
*In the Realm of the Puppet Mistress or I am My Own Freak Show: a journey through technologically-mediated abject love*

GashGirl, aka The Puppet Mistress, an erotically reconstructed irreplicunt, has left RL (real life) for VL (virtual loves). GashGirl logs in to the dynamic text-based environment she has constructed within three real-time virtual communities tagged MOOs. Her continuing project is the exploration of the abject and the sublime within negotiated sexual relationships experienced entirely on the net, and the comparison between physical and disembodied states of desire.

Morphing from perpetrator of cyberfeminist slime to baroque online dominatrix, the tantalizing deterritorialized vampyric body of The Puppet Mistress slips through the screen to stroke, bite, claw, wound, dominate, punish, kiss, embrace and fuck her compliant puppets. The fluid contract between The Puppet Mistress and Her Puppet has one fixed point: RL details (name, age, gender, occupation etc) are irrelevant and must be abandoned before entering the Puppet Quarter.

For Virtual Futures, GashGirl will present some brief excerpts from *Tales from The Puppet Mistress* , and conduct an on-line tour of her suite of rooms within the Puppet Quarter at lambdaMOO, interacting with characters and guests who may be online at the time. Theoretical issues addressed by the on-going project will arise from this real time demonstration.

Throughout the weekend at the VF Web Nexus, GashGirl proposes to run a day/night workshop entitled *Cabinet Baroque*, the construction of a thematically-linked set of spaces on a MOO, possibly PMCMOO (Post Modern Culture MOO).

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### 3-A-2: Josophia Grieve (Netherlands Design Institute: josophia@xs4all.nl): *Web IMAGINATION: Giordano Bruno visits MediaMOO and other real-time, networked, evolving environments in text + multimedia*

Giordano Bruno, Italian nomadic philosopher, artist and memory magus was burned alive as an impenitent heretic in Rome in 1600..A martyr to the imagination, Bruno had used the new medium - print - to communicate dangerous ideas and techniques to a potentially wide audience. His system enabled the user to experience other realities - places, images, vitality - in a realm which couldn't be controlled by the church * - in the human mind.. He left a prophetic legacy of hermetically encoded keys for the development of a universal memory system, concepts that have begun to be manifested in the Internet.

In 1993, Giordano Bruno was reborn as simulacrum at MediaMOO, the Internet and discovered that many of its* instructions, images, ideas, symbols and analogies had been incorporated in the MOO's construction. A MUD is a multi-user dungeon: a networked software program that runs over the Internet and can be used by numerous participants to build environments, play and communicate in real-time. A MOO is a 'MUD, object oriented': it has an object-oriented programming language incorporated into* the environment which is easy to use and enables the user to construct their own objects.

MOO's and MUDs are described as 'textual virtual realities' Like a novel, they are experienced in the imagination and become an alternative world which can be accessed at any time. The difference is that in a MOO, the user participates in the creation and development of the story interactively with other participants as they *develop and extend the MOO.. The MOO toolbox enables the participant to design and program their environment (place), characters, new objects and actions. Magical symbols and allegorical functions embedded in objects, places and gestures become new ways to generate meaning and create stories in virtual environments.

MOOs are 'living laboratories' in the sense that they are an experiment for collaborative design and social interaction over the Internet. Text-based MOOs provide cues for the imagination to visualise its own world Simple graphical and hybrid MOOs have been created on the World *Wide Web with the browser MOSAIC Networked video and audio *systems currently being meshed over existing Internet structure will *enable another level of interaction. MOOs enable us to imagine what it *will be like when high resolution 3D computer graphic-generated *'virtual environments' can be accessed over wide area networks: when *a participant connects to a shared panflourescent environment with 3D *audio and finds a toolbox at their disposal which would enable them to *define and design their characters, places, objects, actions and *communication.

*During the session, Giordano Bruno will visit: the text-based MediaMOO *and Divination Web: the hybrid multimedia BioMOO, WaxWEB and *MetroMOO in Amsterdam's Digital City.

# Information Age Strategies
## 3B (SO.21, 6:10 - 7:30)

**3-B-1: James Der Derian (Visiting Senior Fellow at St Antonys College, Oxford / U. of Massachusetts at Amherst, Dept. of Political Science: james.derderian@st-antonys.oxford.ac.uk)**
*Virtual Security: The Simulation of War and Peace in the Age of Video*

This paper is prompted by a suspicion that strategic simulations have constructed a 'virtual security' based on a language of symbolic information which has increasingly tenuous ties to the physical, natural world. My intention is to study the growing role that strategic simulations, in the sense of a virtual continuation of war by technical means of verisimilitude, have come to play in the formulation, execution, and media representation of western defence and foreign policies. Inertial in their reliance on past experiences, seductive in their technical complexity, and hermetic in their limited language and coterie of makers and players, simulations have given rise to a new technological dependency and a possibly perilous resistance to rapid changes currently taking place in world politics. Military officers learn strategy in networked simulation centers; U.S. infantry divisions fight the last surviving Soviet brigade in the Mojave desert; diplomats prepare for terrorist attacks with simulations; scientists use computer simulations to study the perils of nuclear winter and global warming; newsmakers use simulations to recreate and analyze international crises; and war games are won and lost on home computers.

Yet outside the circle of defence experts, no systematic, theoretical investigation has been undertaken of the impact of these developments on U.S. foreign policy. Because simulations have proliferated with little attention into so many areas of war and peace, a critical inquiry that takes advantage of extra-disciplinary approaches is needed to assess the putative advantages and potential dangers of strategic simulations for international security.

**3-B-2: John Browning (Executive Editor of *Wired UK*: jb@wired.co.uk):** *The Wrong Revolution*

Perhaps we've been talking about the wrong revolution. Perhaps it's not the technology that will make the twenty-first century different from what has come before, but the stuff the technology works on. Although the history of the industrial revolution has taught us to look for answers to questions about the future in the logic of machines, perhaps we should instead look at the raw materials. Information is profoundly different stuff from the iron and coal which fed the machines of the industrial revolution. This talk is will begin to explore those differences, and begin to make suggestions as to how the businesses, organisations and economies might be changing to reflect those differences.

# NonLinear Dynamics in Philosophy
## 3C (Library Room 1, 6:10 - 7:30)

**3-C-1: Joan Elizabeth Broadhurst (U. of Warwick, Dept. of Philosophy: j.e.dixon@csv.warwick.ac.uk)**
*$10^{29}$ AD: The Earth Becomes Inaccurate*

*Two quotes in lieu of an abstract: (one sane and one sick)*

"...The difference between Chronos and Aeon is one of regimes. On the one hand the fixed subject of Absolute State - controllable, isolatable, accusable, debatable and hangable. On the other the collective assemblage, the group subject of the Virtual State defined by those relative speeds that compose it, and the affects and powers that fill it - an immanent flux constantly disassembling and reassembling. Don't whimper for the loss of our fixed identities, constantly being ruthlessly readjusted to meet the demands of capital's technological upheavals. Deleuze and Guattari have no such reservations. What they seek are the transcendental conditions for change and creativity, not fixed and eternal categories. Redesign and reconfiguration are part of their definition of life, not a crime against our humanity. Chronos is a system of imprisonment..."

"...Planes of consistency, BwO. Yeah, yeah, yeah, so you wanna be a nomad. You may have plans of how to make yourself one, write as many handbooks and guides as you like, even start self-help groups...but believe me, you're never gonna make it"

**3-C-2: James Flint (London: flint@plateau.win-uk.net)**
*How to Make Yourself a Plane of Consistency: towards an understanding of the mind in terms of chaotic attractors*

In *Coldness & Cruelty*, Gilles Deleuze splits Freud's notion of sadomasochism as a single and complete phenomenon into two distinct tendencies, sadism and masochism. In this paper we will show that for Deleuze, both sadism and masochism can be isolated as instances of *feedback*: each is a particular type of transcendental short circuit. By taking sadism and masochism as the two extreme examples of the mind's reacting with itself, and by linking these examples with well-known tendencies in philosophy and literature, we hope to link certain aspects of mental activity with particular basins of attraction, laying a groundwork for a new understanding of the mind and ultimately for a conflation of the physical and the mental itself.

# The Realities of Science Fiction
## 3D (Library Room 2, 6:10 - 7:30)

**3-D-1: Laura Chernaik (U. of Nottingham, American & Canadian Studies)**
*Spatial Displacements: Science Fiction Studies as Geographical Materialism*

This paper applies David Harvey's 'geographical materialism' to the field of Science Fiction Studies. I look at two science fiction writers, CJ Cherryh (Carolyn Cherryh) and Samuel Delany, who have each displaced a contemporary 'transnational economy' into a science fictional multiplanetary economy. I argue that this displacement enables the development of a complex

narrative of identity and desire. Cherryh and Delany's re-imaginings of transnational economy as multiplanetary economy expand upon and critique Harvey's Lefebvrean argument that 'spacialities' are specific to a mode of production. Both SF writers specifically link the construction of spacialities to ways of constructing gender and sexualities as well as to changes in the mode of production. For Delany, the narrative focuses on the construction of difference, as opposed to identities, exploring this in the context of feminism, antiracism and gay male identity: Cherryh's texts focus on gender difference an species difference. My analysis of the SF novels focuses on the relation, in the texts, between 'spacialities' and the construction of identity and difference, whether it be of race, gender, sexuality or species. I argue that Cherryh's texts undermine our notions of gender identity by exploring notions of species identity in a multiplanetary, alien economy; Delany additionally undermines species identity, leaving us with a remarkably fluid sense of multiple difference.

### 3-D-2: Istvan Csicsery-Ronay (Depauw U., English and World Literature: icronay@depauw.edu)
*Living in Downtime: Virtual Reality, Science Fiction & the Future of Religion*

The paper begins with the assumption that some form of intense and convincing VR technology will become available to large numbers of people. The paper then speculates on ways in which such VR-installations and experiences can lead to virtual religious experiences. Most of the significant loci of religious experience are certainly simulable by VR — leading to the emergence of virtual peak experiences, sacred spaces, rituals, and congregations. In science fiction, this virtual spirituality already has its pretextual sacred narratives. The paper discusses each of these categories and their possible trajectories both in virtual cultic practice and in a real world transformed by them. The second half of the paper discusses some of the possible virtual religions as imagined by contemporary science-fictions writers (Lem, Gibson, Dick, Cronenberg, Laidlaw, etc.). The main focus of the second half is the virtual religion of Mercerism depicted by Philip K. Dick in *Do Androids Dream of Electric Sheep?* This entirely simulated religious cult is the backbone of Dick's famous novel, and yet it has been avoided in most commentaries on Dick, to the point of being excluded entirely from the film adaptation, *Blade Runner*. Yet Mercerism is perhaps the most realistic element of Dick's imaginary landscape in the novel.

## The Realities of Networked Computing                    3E (Room F1.07, 6:10 - 7:30)

### 3-E-1: Iain Craig (U. of Warwick, Dept. of Computer Science: Iain.Craig@dcs.warwick.ac.uk)
*Risks to Freedom Presented by Multi-Agent Systems*

Multi-agent systems are being proposed for a number of contexts where autonomous agents are required to act in concert with other agents and with other software in order to perform certain tasks. For example, it has been proposed that autonomous software agents be employed to gather information from the Internet: these agents would access databases and bulletin boards, collecting information that is of potential relevance and sending to other agents who determine its true relevance. The agents of the multi-agent system can access programs and data on different machines. There is a clear sense in which agents can be used to restrict civil liberties: one can foresee, for example, agents being used in surveillance of citizens, particularly when television, telephone and computer are connected. Agents could monitor (and perhaps censor) what one watches on television or listens to on CD or the radio. Agents could monitor bank accounts to determine where money is being spent: this could be used to monitor citizens' whereabouts. Given the increasingly computerised nature of the world and the increasing number of networked systems, such information gathering becomes a real possibility. There are the possibilities for restricting freedom of movement, freedom of choice, freedom of thought. Furthermore, it becomes possible for an unscrupulous agency to tamper with records with the effect that one simply disappears—literally becomes a non-person. In this paper, these issues will be discussed in more detail.

### 3-E-2: Meurig Beynon & Steve Russ (U. of Warwick, Dept. of Computer Science)
*Worlds Before & Beyond Words*

The advent of computer-generated environments for simulating experience of the real world invites a reappraisal of the role of classical and neo-classical theories of computation (i.e. views of computation based on linguistic and logical frameworks). To make more effective use of computers in connection with Virtual Reality requires a shift in emphasis towards computers as state representers rather than calculators, towards the construction and analysis of environments rather than documents, and towards empirical rather than theoretical approaches to knowledge representation.

This talk will discuss the prospects for gaining new insights into empirical activity through the systematic construction of models (typically - but not necessarily - computer based) in which real world state, as perceived by a particular agent, is imitated directly through the use of suitable metaphors. Such activity is exemplified in the construction of engineering models and the development and calibration of scientific instruments. A characteristic ingredient of the modelling processes involved in these applications is correlation of the results of experiments and observations that are performed in parallel in a real world environment and in the associated physical (e.g. computer) model.

Conventional computer programming paradigms are not well-suited for constructing models by empirical methods. Amongst widely used software tools, only spreadsheets are well adapted to imitating real world state as it is captured through observation and experiment. The philosophical ideas to be introduced in our talk will be illustrated with reference to practical case-studies and software tools that have been especially developed as part of a long-term Empirical Modelling Project being pursued in the Computer Science Dept. at the University of Warwick. A key concept in this research programme is the development of agent-oriented models in which the dependencies between observables that are used for communication are specified using generalised spreadsheet principles.

## Saturday May 27

### Memetic Weaponry

#### 4-A-1: Ben Greenaway (U of Warwick, Depts. of Math & Philosophy)
*Weapons Drugs Tools*

"Statement of the Final Academy: I consider that immortality is the only goal worth striving for: immortality in Space. Man is an artefact created for the purpose of Space travel. His is not designed to remain in his present state anymore than a tadpole is designed to remain a tadpole. But Man is in a state of arrested evolution. Time is that which ends, and Man is in Time. The transition from Time to Space is quite as drastic as the evolutionary transition from water to land. But who or what is keeping us from realising our biological and spiritual destiny in Space? Our little local war comes down to a conflict between those who must go into Space and die, and those who, owing to a parasitic dependence on humans, will die if we go..." July 1982...Uncle Bill

Control, Evolution, Schizophrenia. The Evolution Control Committee directs you to William Burroughs. (Also; Brion Gysin, John Giorno, & Genesis P. Orridge) "I need to emphasise the importance of these gentlemen no further: you are directed to their works, in whatever form." [John Savage in "The Information War."] 'Weapons Drugs Tools' designed as an initiator for curiosity, also a reminder. Hear some of your favourite Burroughs! An all new assemblage! A set of three semantically challenged communiques from 'Control' about control of the BwO, addiction, drug hysteria, virus, virtuality, apocalypse, and fear, n' stuff.

#### 4-A-2: Robin MacKay & R.B. O'Toole ( ***collapse*) (pyudo/pypcs@csv.warwick.ac.uk)
*Megadérive*

--Entertainment systems as the motor of C"! Kapitalism.
--Embedded reafference effect implements positive feedback between BwO and human body. Evolving technologies mediate and reprocess power strips consciousness to a bare technics of subjective reproduction reality becomes deregulated. You pay for an interface's intimacy and speed and invent your own frictions, coevolving with other players in a mutating biospace.
--Meanwhile in the future Sade, Schreber and Gilles de Rais are miraculating their own scenarios, schizophrenic affects let loose by the dysfunction (?) of a central monitoring system which ensures a body's libidinal integrity. Gameplay irreducible to 'insane' fictions. Outside and inside unfold as immersion dissolves the theatre of representation. Bodies become fashionable fetish objects.
--Libidinal-ballistics (techno-Spinozan ethology) track the machinic phylum of the human body as its transcendent investments are drained.
--VR is apocalypse technics at work--in the Sega labs research is on overdrive as they prepare to wreck our bodies.
--Critique, Kapital and technology are intextricably implicated in a precipitous death derive whose nihilistic singularity occurs when its autoproductions exceed the striation of its ostensible operators. That's when you realise, and it's already too late, you're already part of the game.
--What's waiting at the end level?

#### 4-A-3&4 - SWITCHBirmingham (Combined Session):
**Mark Fisher (U. of Birmingham, Dept. of Cultural Studies):** *Uneasy Listening*

You're listening to some music. The phone rings. You get up to answer it but as you do you realise that the phone trills are a sound effect, "part" of the record.

Uneasy listening. Unhomely music. Beyond Music for Pleasure. Ambient music disturbs the relationship between "listener" and "environment". And all our music now, especially the noisiest, is ambient.

Ambient begins the moment you start hearing the music of the city, the moment you start hearing the city as music. It's not only a matter of music, although it's always a matter of (de)composition--the dismantling of the organism by the BwO.

Which is what always happens when things get genuinely interactive. Forget ROM. *Videodrome* registered the real impact of interactive media (that is, the impact of interactivity on the Real): schizo melting of the reality studio as subjectivity vanishes in a somnambulant haze, hardware morphs into wetware and New flesh replicates itself out of the gory disintegration of Spectacular Optical.

New flesh makes man obsolete by opening him up. It's all about soft copies, soft cities, soft machines.

Becoming-molecular. Immersing your Self means no more self. No more theatre, no more show, no more home.
*Time to switch (on).*

#### Tim Burdsey (U. of Birmingham, Dept. of Cultural Studies: cls2tdb9@ibm3090.bham.ac.uk)
*Smart Ideas: Memetic Vectors and the Information Diaspora*

Replicate and survive...Richard Dawkins' memetic schema has drifted somewhat since its memesis in 1976; his original notion of extra-somatic gene analogs has been hacked and rewired in the dialect of viruses, contagion and disease forming infectious, mutually-assisting meme-complexes. Memes are coded with similar instructions: axon-corrupting data urging infection and replication in the host brain. The *hook* works in parallel with the *threat* symmeme, the former promoting replication, the latter promoting adherence and attempting to prevent misreplication of the memotype.

Meme mulitiplicities flock along lines of escape; following unpredictable trajectories, competing for, and colonizing vulnerable belief spaces. The cyberpunk adage "information wants to be free", is a particularly potent, yet deviously simple

idea-virus triggering auto-stimulatory feedback loops as hackers and cipherpunks crack codes and discharge data into the infosphere. 'Cyberpunk' becomes a spiralling meme-complex which, as it encourages the liberation of more bytes of captive data, so establishes more possible vectors for its transmission and infection. As increasing numbers of people jack-in to the matrix, the meme writes itself to more and more brains and memetic traffic reaches improbable levels...

**Rob Heath (U. of Birmingham, Dept. of Cultural Studies: heathrj@ibm3090.bham.ac.uk):** *Reproseduction*

Sitting, waiting in the corridor of the sperm bank our *HERO* receives a visitation from an *Angel*; whether s/he/? is a messenger from Virilio's virtual Cybergod or one of BEELzebub's Harpies, our hero cannot be certain. He sees:- *TechnoCapital* has freed *Oedipus* from the Ludovico's Technique and he is no longer subjected to the images of his *fucking* father and mother which V's Cybergod has used to torment him since the day Freud first dreamt. He escapes to run *RIOT* through the *TechnoPagan* generation, the sons and daughters of nitrogen tanks and an ever decreasing gene-pool, the generation which *TechnoCapital* is inbreeding for the first leap into post-humanity. Technology poses as the neoNatural, Reproseducing the *TechnoPagan* schizoid-mutants whose taste for Virtuality is increasing, and whose genetic and mimetic resources are nearing *Perfection*.
    *TechnoSlaveryPLC* = Downloaded Mass Consciousness
    What can our *HERO* do?

**Stephen Metcalf (U. of Birmingham, Dept. of Cultural Studies):** *Vortikill*

Three principal characters--Wyndham Lewis, Marshall McLuhan, Jean Baudrillard--vorticist clowns in some bleak circus-- *VERY WELL ACTED BY YOU AND ME.*
    The Scene--pale grey screens flicker in apathetic sunlight. Sea mists of winter descend, hardening the Black Ice. Ponderous political arabesques of red and white cloud orbit the desert of the socius, whipping-up a sand-devil, a howling cyclone, a vortex, an ingesting eye, a black hole, a suicidal attractor upon the energetic fluxes approaching the cold body which neutralizes them. Economic reversal of overheated media. A hot body begins to emit black-body radiation, leaking vampiric competitive equilibrium across the statistical average of the datascape. Invisible hands of auctioneers are autoamputated, erasing signatures in the dust as they slip into a dark, lunar crater cut into the desert by the vortex.
    Slow attacks of inertia creep across virtual wastelands. Blind, one-eyed refrigeration machines of fascist weather prophets on sterile drives to harness the violent speed of the cyclone, while remaining anomalous autocrats in the high mass density of imploded stars, claw for security in the evacuated eye--momentarily becoming emperors in the desert. Flushed to the metastatic dead centre of a reeling suicide ring, the tetanized economy reverses again--chaos invades commerce and bursts it like nitrogen in the whirl of reverse transcription. And so the sea mists of winter descend. . .

## Sexual Control & Neural Micropolitics          4B (S0.21, 1:00 - 3:40)

### 4-B-1: Trudy Barber (Institute of Psychiatry, London)
*Sexual Technicians and Computer Fetishists*

To examine comparisons between sexual situations and interactivity within cyberspace. To extrapolate on concerns involving the interactivity and the experience in relation to sexual conduct, and to review sexual role playing in an alternative environment. Identifying Cyberspace as an analogy for sexuality, by using technology laterally as a vehicle for interaction as sexual technicians. I would also discuss isolationism from real time relationships, sexual deviations and the dirty mouse syndrome. The rise of cyberfeminism and cyberculture and its relationship within fetishistic underground culture. This could lead to political discussions on censorship and morality within virtual space. Finally, I will emphasize my research which involves fantasy re-training and its potentials for developing a synaesthesia of sexual signifiers.

### 4-B-2: Kath Renark Jones (U. of Warwick, Dept. of Philosophy)
*Control Collaborators & the Dynamics of Force*

In line with traditional disjunctive thought, many philosophers have reacted to the collapse of the full-body of the State--as condition for association through community--by locating humanity's 'other' in the productions of electronic media and/or scientific technological development. Humanities need to relocate and redefine the body in order to circumscribe desire, in this way continues to follow the inveterate path of oppositional construction. Meantime, despite the attempts of theorists to restrain the flesh, and alongside the labours of the human genome project and artificial life programs, the human body is spiraling out of control, engaging in increasingly complex associations with the non-human: integrating ever more rapidly with evolved and evolving viruses; participating in prosthetic and transplant procedures with animal and non-organic life forms; challenging the efficacy of a 'self' that is constantly transmuted and transformed through virtual technology and across the Net.
    Experimentation with the body, its transformation and modification, is the culture of the 90's. Identity boundaries of sex, gender, size, age, musculature, etc., are becoming evermore fluid. These delimitations of the body, whose function was primarily that of enabling and effecting social control, whilst not being consigned to irrelevance, have begun to operate more as ironic stop-gaps in a flight away from stability. This paper will look at the ways in which the force of this movement is counteracted by the coercive power of those State and global institutions which still seek to contain the energetic dynamics of the body, exploring the nature and effectiveness of those structures and their witty and unwitting collaborators in the area of philosophy.

**4-B-3: Felicity-Ann Van Rysenbergen (U. of Melbourne, Dept. of English & Cultural Studies: cyberfem@ariel.ucs.unimelb.edu.au):** *Terminal Bodies, Virtual Subjects: Feminism Meets Cyberculture*

Although recent trends in cultural theory seem to be considering the way in which technology intersects with human subjectivity, little more than vague utopian directions for the future of an 'information age' have so far been offered. It is through a feminist identity politics, however, that some of the concrete questions about how individual subjects (and particularly feminine subjects) might negotiate these 'virtual' spaces that conceivably one may begin to tease out ways by which to theorise the 'actual' space in which our bodies co-exist within machinic space, and how the emergence of cyberspatial technologies raises the possibility of navigating alternate body images in cyberspace.

During the course of this paper, I discuss some of the spatial politics of the proprioceptive body's existence within a virtual reality, and how feminism and cyberfeminism might intersect with these issues. I briefly discuss the works of Liz Grosz (especially here latest book *Volatile Bodies*), Judith Butler, and VNS Matrix.

**4-B-4: Camilla Griggers (Carnegie Mellon U., Program in Literary & Cultural Theory: cg1m+@andrew.cmu.edu)**
*Surge Suppressor: Neural Micropolitics*

Psychopharmacological treatment rewires the traumatized subject's desiring body and faciality through a process formally expressed within psychiatry as "symptom management." Symptom management modulates subjectivization by deterritorializing potential conjunctions between neurochemical processes and abstract social facialities, working at a neurobiological ground zero of social being and becoming. Psychotropic drugs enter the subject through the organic body, territorializing three neurobiological systems of the brain: the serotonergic system, the limbic system, and the autonomic nervous system. Each chemical intervention actualizes potential conjunctions between adaptive defensive mechanisms presenting as "maladaptive" symptoms and "normative" (i.e., functional, intelligible and socially acceptable) ideation, affect and behaviour.

The most pervasive psychic defence mechanism, dissociation appears across a vast strata of symptomatologies, including schizophrenia, borderline personality disorder, multiple personality disorder and post-traumatic stress syndrome. Within the micropolitics of subjectivization, dissociation can be understood as the de-molecularization of memory and affect, the reduction and separation of memory-blocks into simpler groups or single particles, and the deterritorialization of associational affective formations. What is repressed through dissociation, however, does not remain dormant but returns as a sequel to trauma: nightmares, memory flooding, somatization, depersonalization, and parasuicidal behaviour. Dissociation (suppression) presents in a wave structure with intrusions (surge) expressing as intrusive memories, flashbacks, night terrors, auditory hallucinations, and memory fragments that can generate their own psychic reactions in the fluctuations of surge and suppression.

Clinical research in the area of abuse trauma, psychopathology and psychopharmacology suggests that dissociative states are not usually responsive to neuroleptic intervention in the long run, and that for all dissociative phenomena, healing involves verbalization and the integrative processing of memories and affect associated with the traumatic stress and its prolonged repression. Yet secondary symptoms produced by dissociation are regularly treated with psychotropic medications, in effect antiproducing the subject's ability to integrate memory and affect with her behaviour, and suppressing the connections between the experience of the individual and the social history of the group.

# The Crises of Fractal Economies                     4C (Library Room 1, 1:00 - 3:40)

**4-C-1: Sven Haferkamp (Institut fur Anglisitk, U. of Aächen, Germany)**
*The Fractal Company or: The Desperate Attempt of Management Theory to Imagine Companies as 'Machinic' Arrangements*

The paper deals with the recent development that modern theories of management as well as poststructuralist theories. Over the last years, management theories have been searching for a new context in which to think planning and control of increasingly more unstable systems of production., because the shift from industrial into information society has led to an accelerated feedback between the companies and the 'turbulent markets' they themselves had created. Making use of chaos theory, companies now attempt a dynamic adaptation to the fast-changing economical parameters through the creation of small, partly autonomous, 'fractal' sub-companies. These 'rhizomatic' fractals should work globally within the economic frames set by the 'virtual meta-company,' but should develop locally synergetic systems of self-organization. The question remains whether this shift is a 'molecular revolution' that creates 'new lines of possibility' beyond a quantitatively oriented capitalist ideology and whether companies can indeed become arrangements with a 'thousand plateaus,' or whether we are witnessing capitalism's final attempt to create local deterritorializations that are always already co-opted by a globally reterritorializing system.

**4-C-2: Franco Berardi (Bifo) (U. of Bologna, Italia)**
*The Virtual Economy & the Limits of CyberTime*

The End of the Modern Project: Democracy is no more compatible with the planetary development of capitalism. The triumph of capitalism produces the transfiguration of democracy. The Italian experiment: cyber-fascism or post democracy? General deterritorialization and hypermodern schizophrenia: dissolution of identities and molecular wars of reterritorialization. Autonomy, secession, creation of virtual worlds.

Virtual Economy and the Double Face of the Net: Infoproduction and the mentalization of labour. The creation of the Info-Econo Sphere: capitalist secession, and withdrawal from the self-destroying planet. The Net is the process of constitution of the extra-planetary world, and the creation of the extra-body communication. The evacuation of the planet, the evacuation of the body. Net is the withdrawal from the war-planet and from the AIDS terror.

Infobahn versus Net: Networking as experience of free knowledge and communication is turning to the end. The economic paradigm is being inoculated in the net through the building of the Infobahn. The present creation of the cybermarket is tightening the connexion between technology, productivity and competition, and this connexion produces an acceleration of the info-production leading to a hypersaturation of neuro-social pathways. The unlimited expansion of cyberspace conflicts with the organic bounds of cybertime.

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**4-C-3: Otto Imken (U of Warwick, Dept. of Philosophy: pyrbh@snow.csv.warwick.ac.uk)**
*The past that never was & the future that never will be: on the convergence, crisis & liquefaction of the geo-economy*

*"Commerce desires to be free,"* (Pieter de la Court, 1662)

My presentation will discuss several recent trends in the global economy which show how the virtual realm, as accessed through capitalism, is today having very real effects on the world and our everyday lives, effects that are not explainable using traditional Marxist or neoliberal methods, but which are accessible using Deleuzo-Guattarian analyses of capitalism as the schizophrenization of the global social system. These nonlinear trends to acceleration & decentralization may seem obscure or even accepted activities which need no explanation, from futures markets to intellectual copyrights, but they are on the cutting edge of capitalism's trend towards absolute deterritorialization and its effective use of the virtual realm to re-create our material world.

My talk will focus on emerging 21st century paradigms of warfare, control & communications, specifically examined within the web of the global computer matrix & the virtual spaces it encompasses. I will show the real functionality of these virtual spaces & how they can & are already being used for not only telecommunications, but also as media for capitalist (i.e. topdown) control of the more kaotic market forces surging below, as a battleground for heterogeneous desiring-processes to fight real wars, *netwars*, with real political & economic consequences. I will end with a discussion of future strategies for gaining partial situational control (temporary autonomy), for accelerating the disintegration of hierarchical control mechanisms, & for surviving the cuming geo-convergence.

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**4-C-4: Ben Attias (California State U., Northridge: hfspc002@huey.csun.edu) & Douglas Thomas (U. of Southern California: douglast@rcf.usc.edu):** *He Plundered the Citadels of Cyberspace: Schizophrenic Dimensions & Paranoiac Machinations of the 'Information Superhighway'*

The space of the internet has been variously coded and signified in a staggering number of ways—from cyberspace to the information super-highway, from chaos to linearity. A recent incident involving the tracking and arrest of Kevin D. Mitnick has served as a temporary point decapiton in the metonymical sliding of the signification of the internet.

This paper explores two inter-related dimensions of the Kevin Mitnick bust on the internet by examining how "cyberspace" functions rhizomatically to allow hackers to be "everywhere," yet "nowhere in particular" and how the process of signification encodes and regulates the name <<Kevin Mitnick>> in order to construct a regime of signs that functions to locate people and events in spatio-temporal coordinates.

The responses to Mitnick's arrest have ranged from the bizarre to the banal. Those responses, however, demonstrate how Mitnick has been both dislocated and located in very particular ways. As a justification for repression, Mitnick is signified chaotically, as a rhizomic, nomadic, desiring-machine, whose sole function is to disturb and perturb the "system." His nature is inherently multiple, and his crime is in fact that very multiplicity. Mitnick's trespass was not a function of where he was, but rather a function of the inability to particularize and locate where he was. Shortly after his arrest, stories of an ersatz escape from federal custody circulated, allowing <<Mitnick>>, once again, to multiply.

The discourse produced by Mitnick's arrest, and in particular the dramatic narrative of pursuit, evasion, and capture which is symptomatic of the discursive machinery articulated by media institutions and law enforcement bureaucracies alike, has worked to discipline and administer such multiplicity, refiguring it not as a rhizomatic line of escape but rather as a fundamental threat to the integrity of the entire "system." This administration itself is in turn symptomatic of something deeper, an administrative trajectory in Western societies that is at stake in all discourses on the "information age."

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# The Limits of Computing
## (chair: Joan Dixon)

**4E (H0.52, 1:00 - 3:40)**

**4-D-1: George Kampis (L. Eotvos U., Dept. of Behaviour Genetics, Budapest, Hungary)**
*How Virtual Could It All Be? The Case of the Inside Observer*

The prevailing approach of Nature is based on a dominating, detached, demiurgic view, invited by the Cartesian object/subject separation that puts the observer outside the observed. The resulting bird's-eye perspective yields, in turn, a desire for an ideally omniscient state. Virtual reality, pushed to its philosophical extreme, seems to assume that the world is a big computer, hence a suitably programmed big computer can be like the world; it promises that omniscience can be turned into omnipotence. But can this be carried out in a consistent fashion, at least as a *gedanken*-experiment? There is a host of pre-VR works that deal with such "in principle" questions, for instance, whether the brain attached to a computer, or indeed a brain in a vat, or a mind watching a movie presented by the eye can tell reality from virtuality, or dream from wakefulness.

The lecture elaborates an idea that adds to this discussion. We discuss why the equivalence of two domains from an external, "scientific" point of view (such as functional equivalence achievable by computer programming), does not imply equivalence from the internal point of view. Internal observers (such as brains in a vat with respect to the computer, or flesh-and-blood humans with respect to our own world) are bound to experience phenomena not properly describable wearing a dualist, externalist mask.

A new conception in the philosophy of science, called endophysics, has been introduced a few years ago to cope with the non-classical phenomena of internal observation, among them, undecidability, causal yet non-deterministic events, the desynchronization of time, and the existence of open-ended, contextual properties. We give a review of this new field with an emphasis on emergent phenomena as results of time-local interactions.

### 4-D-2: John Collins (U. of Warwick / Birkbeck College, Depts. of Philosophy)
*Skolemizationism*

The standard scientific account of cognition is premised upon the hypothesis that mental processes are computational processes and the thesis that '...is computable' is extensionally equivalent to '...is Turing-computable' (the Church-Turing Thesis). this account will be given the title Formalism (On this understanding, to be somewhat crude, cognition is a procedural transformation of symbol strings).

The brief of my paper is to present an argument which apparently proves the unrealizabitlity of Formalism. The suggestion will be made, however, that things are not as they seem: what must give is not Formalism as such, but a particular view of information. The argument is based upon "The Skolem-Löwenheim theorem" (a constellation, in fact, of results in Model Theory closely allied to Gödel's Completeness theorem for first-order theories). Extrapolating from a detailed proof, I will conclude that there is no unique model, but this is not a problem if the very notion of a model is understood 'instrumentally'. Alternatively, the mind is syntactic, not semantic. The semantic arises from the exigencies of explanation. It will be suggested that Turing's achievement is most perspicuously understood in this manner.

### 4-D-3: Paddy Davies (U. of Warwick, Dept. of Philosophy)
*Computation and Implementation*

The historical and conceptual ties between science and mathematics have become increasingly intense since the development of electronic computers. Although human calculation has always been associated with mechanical calculation—fingers, twigs, the abacus—only the computer has had the technological sophistication required to outperform the brain. In so doing, it has opened up previously intractable areas of mathematics to investigation: neither chaos theory nor artificial intelligence would be possible without a computer.

So far, the exploration of this wider computational space has been focused solely on electronic computers. However, recent work in biology and chemistry promises devices that also possess novel computational abilities. Based on molecules rather than electronic switches, biological computation could represent as big an advance as the initial development of computers has become.

A major obstacle to addressing the implications of these developments is the lack of an understanding of computation that is sensitive to the material differences between computational machines: wooden beads, electronic switches, molecular solutions, neuronal arrays. The aim of this paper is to provide the outlines of such an account. By characterising 'computation' as an abstract machine that is implemented in various physical devices, it becomes possible to analyse the way in which developments like biological computation may influence our ideas about what is effectively computable. It also suggests how a positive investigation into changes in effective computability might be undertaken.

### 4-D-4: Adrian Mackenzie (Australia: adrianm@zeta.org.au)
*An Undecidable Advent: Computation, Cryptography and the State*

The notion of computational undecidability formulated by Alan Turing in 1936 is usually read as a theoretical limit on the algorithmic power of the computer. However it is possible and perhaps necessary to understand undecidability as profoundly affecting our experience of computation. It not only troubles any certainty about what computers can or will do, it unsettles the lines between what is inside the bounds of computation and what is outside it. Undecidability divides the borderline between computers and their context. Arguably it divides their origin and perhaps their destiny.

Using the Turing's work on computation and cryptography before, during and after World War II as a guide, this paper seeks to think about the advent and the eschatology of the computer as what Turing called a "decision problem". Any experience of computers, or any situating of computational technology in its historical, theoretical, or sociological context that does not countenance the effects of undecidability is prevented from seeing how an encrypted outside resides inside computers. It fails to see this exteriority as a hidden dynamic instability or a structural incompleteness which computation always seeks to fill and which the State (for instance) responds to with incessant projects and plans to enclose or limit.

## Occult Cyberspace                                      5A (Panorama, 4:10 - 6:10)

### 5-A-1: Peter Oppenheimer & Susan St. Clair (U. of Washington, Human Interface Technology Lab: peter@hitl.washington.edu): *What will you taste like in cyberspace? Recognizing the self in virtual reality*

We enter cyberspace, we become disembodied, we accept it or struggle to redefine our shape. Our image is shaped by identification and we are lead to consider the arbitrariness of the individuated self even in the so-called non-virtual realm. The transformative nature of virtual reality technology provides more than a fun house mirror in which we can see our selves as part of a greater whole, and explore the boundary between self and other.

If we are made of cells, then WHAT is made of us? As we put on the goggles, the force feedback suits, silicon implants. the apparent boundary between biology and technology breaks down. We must respond with vigilance, and awareness. The snail does not in his individuality "grow" his own shell anymore than I through effort lengthen my hair or fingernails. We must consider our true level of participation in life. For we are not just building our evolutionary successors of the future. We have

already grown our present day techno-biological host in which we live as symbiotes. An ironic activity in a culture that does not readily to accept interdependence.

What then is virtual reality if not an evolved reality itself? Is not the answer based on the advantage and limitation of the perceiver? Does not belief lie at the core of perception, and in one blow, both limit and liberate the perception, create the memory-image and mold the apparent individual?

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### 5-A-2: Fredd Evans (Leamington Spa) (c/o. enpci@snow.csv.warwick.ac.uk)
*Kill a Queer for Christ Day 1993*

I can feel them closing in, matching our every move for move our cover is blown, they've seen our smarteen innocence for the lack of conscience that it is (come up with your hands out) and opened fire. everything, seems to be going according to plan, Elvis, resplendent in her best green smock (to minimise reflection) stands centre stage yelling instructions to everyone waggling her stumps in time the music, adjusting the stirrups when the mood takes her. Jill's sealed off the corridors around the operating theatre for added security, I can hear her pacing along outside making obscene suggestions to the hostages at regular intervals and, owing to his relatively strong stomach and intrinsic *schadenfreude* Ivan has his arm jammed half-way up the patient trying to retrieve the device, an unforeseen event but the matter is in good hands. my god, he keeps giggling to himself, its full of stars. for me, I can't say I know much about anaesthetics, but checking the patient; I can see that having survived the in-flight lustration she's still breathing and dosed to the gills, so yeah, all things considered--I think we're doing remarkably well.

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### 5-A-3: Alan Moore (author of *Watchmen, V for Vendetta, From Hell, & Big Numbers*)
*Light of Thy Countenance*

Grown out of a desire to provide a contemporary conceptual basis for the range of phenomena and altered mental states traditionally referred to as "magic", *LIGHT OF THY COUNTENANCE* is an attempt to regard the trappings of modern existence from the viewpoint of earlier cultures; those that formed their worldviews long before the advent of the Age of Reason and thus to some extent depended on what we would now describe, perhaps pejoratively, as "magical thinking".

A form of temporal chauvinism is inherent in the way we view the cultures that preceded ours; the way they lived and how they saw the world. When we evaluate past cultures (or, as frequently, contemporary cultures other than our own), we judge them by how closely they resemble us. If their surviving records or their architecture seem to us possessed of a scientific understanding that approximates our own, as is the case with ancient Egypt, we conclude that such a culture may be worthy of a place in the great league-table of civilized development that we have drawn up, with our modern milieu comfortably positioned at the top. It seems as if we constantly make the assumption that these other, earlier notions of reality are inherently *inferior* to our own, rather than merely *different*. Like our own, these now-abandoned worldviews were the product of their times, designed to measure the parameters of our reality as it was at the time *perceived* to be, and thus at least in one sense, truly *was*. Where the native man or woman may have seen a potent invocation of the cyclic force of nature and fertility at work within the cosmos, we saw only totem poles and demons. Concepts not included on our map of what was real and what was not became, by their inherent nature, quite invisible to us. Thus hidden, they became, by definition, *occult*.

*LIGHT OF THY COUNTENANCE*, as a performance piece, emerged from various experiments in emulating "magical" archaic worldviews in the hope that they might allow different insights into our contemporary situation. The work is based upon the notion that when viewed through, for example, aboriginal eyes, the features of our modern world that have become familiar and dull to us might have a radically different appearance. the television set in the corner might not appear as the ubiquitous and therefore barely noticeable commonplace it has become for us. The television set, even when its apparent techno-miracles had been explained, would still, quite properly, be seen to be a deity of unimaginable power and influence.

If we allow ourselves, just for a moment, to see Television as a god then we might profitably wonder at the nature of this deity, this vast electric entity, invisible and omnipresent. Our forebears, having named the god, would possibly attempt an evocation that might perceive him in his natural form. When we speak now of evocation it is used in a poetic sense. A piece of music may evoke a memory of Spring. A painting may evoke the fears of childhood. Classical cultures used the word to signify the summoning of an ethereal entity into plain sight, made manifest and visible to onlookers. The word "invoke" conversely meant inviting the appropriate god or entity into yourself, becoming in this way possessed by the etheric essence of the deity. *LIGHT OF THY COUNTENANCE*, as a performance piece, is an attempt to blur both the archaic and poetic concept of what we call evocation, using poetry as a material substance through which the etheric, insubstantial essence of the deity might manifest itself, allowing the celestial presence of the Television God to speak through human lips, using the poet as trance medium to broadcast its divine transmissions. In America, they call it "channelling." In this instance, that's as precise a definition of the work as one might hope for.

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## The Female Future                                         5B (S0.21, 4:10 - 6:10)

### 5-B-1: William R. Macauley (U. of Manchester, Dept. of Psychology: macauley@hera.psy.man.ac.uk) & Angel Juan Gordo-Lopez (Bradford U., Dept. of Social & Economic Studies: lopez@hera.psy.man.ac.uk)
*Cyberspace, Proprioception, & the Fetishization of the Female Body*

This paper will address some recent trends in the field of virtual reality (VR) and associated discursive practices which seek to (re-)define human morphology. It will discuss some of the ways in which an idealized 'female' body surface has become a locus of (un)conscious processes (e.g., projection) which reveal and conceal fetishization of, both, VR technology and fantasies relating to visuo-tactile-proprioceptive-sensations in virtual environments (i.e., cyberspace). The main focus will be on images/discourses which emphasize the 'dressing-up' prescribed for perception and action in cyberspace, and ways in which these images/discourses converge with those presented in a range of popular media (e.g., film, fashion magazines, comics) and

erotica (e.g., rubber/plastic/lycra fetish magazines). Furthermore, this paper will seek to provide an insight into the relationship(s) between the body prepared for sensorial immersion in cyberspace via VR peripherals (e.g., DataSuit, head-mounted display) and the virtual prosthetic body as perceived/realized in cyberspace per se. It will be argued that perceptual plasticity of the body-image - specifically with regard to perceived visual/tactile/spatial properties of the body surface - has a number of similarities with the psychoanalytic concept of a `dream screen', body-image and the dream screen constitute phenomenal surfaces for the manifestation of (un)conscious fantasies and facilitate polymorphous forms of desire.

### 5-B-2: Liana Borghi (U. of Firenze, Italia: liborg@cesit1.unifi.it)
*Sextual Futures: Some Observations on Sex and Gender Positions in Women's SF*

At the close of the millennium, despite differences in background, medium and audience, the array of gender in women's fictional and artistic performances indicates a commitment to undo the male/female, hetero/homosexual distinctions which underpin our social sex/gender system. Della Grace's performance and photographs, sailing close to the coastline of queer theory, sound the postmodern shallows of gender citation and parody, of phantasmatic identification with gay aesthetics and bodily practices. But I am more concerned with the "historical" link: the ties with liminal figurations designed to assist us in rethinking socio-political coordinates in our technoculture.

The figurations that engage in such performances range from vampires to cyborgs and aliens. Vampires enact the perverse displacement of sexuality from the "correct" post-oedipal and heterosexual locus (the genitals) to the "incorrect" regressive pre-oedipal orifice (the mouth), and point the way to a (lesbian) revision of sexual pleasure.

Cyborgs and androids, bodies that belong to a post-human and post-gender economy, interact sexually with humans, swapping subject/object positions with them, unless, as it may happen, they opt for ecstasy in perfect cybernetic interfaces. And women, weary of their own never ending commodification within patriarchy, turn to computers for better sexual performance and companionship. Or else they bend their ingenuity to producing machine- and cyber-sex that consign human sexual partners to obsolescence. But despite the attempt to defuse the mechanism of gender at its most vulnerable and least defensive junction, traditional sex-gender alignments continue to infest not just texts but cyber-narratives as well.

### 5-B-3: Gwyneth Jones (Science Fiction Novelist & Critic, Brighton: gajones@pavilion.co.uk)
*Red Sonja and Lessingham In Dreamland*

Animals do sex for money: for strictly economic reasons. "They choose" the sexual behaviours and even the sexual identity that "they believe" that will ensure the greatest return in terms of reproductive success. But more and more, for human animals, reproductive success is not money. Money is money: status, territory, resources. According to the science, we will adjust our sexual behaviour accordingly.

World wide creation of wealth is a more insidious and more damaging attack on sex/gender roles than anything sexual politicians can achieve. And it won't stop. We can't *return to nature*. Nature is what we do: and increasingly, inexorably, it appears that we don't have two complementary sexes anymore, each safe in its own niche. All there is left is gender: difference: an us and them situation Two tribes, separated by millennia of grievances and bitterness, fighting for control of one territory, and scrabbling over a diminishing supply of resources. That's what I see, that's what I'm writing about. I think the decline of sex and the rise of gender is the most important & frightening feature of our future; and of all the novelties of the nineties, the least likely to fade away.

## Localizing GeoPolitics                    5C (Library Room 1, 4:10 - 6:10)

### 5-C-1: Alphonso Lingis (The Pennsylvania State U., Dept. of Philosophy, author of *Foreign Bodies* & *Abuses*)

### 5-C-2: Alistair Welchman (U. of Warwick, Dept. of Philosophy: pyrdd@snow.csv.warwick.ac.uk)
*Machinic Thinking: Emerging Intelligent Biocapital*

Deleuze & Guattari's *Capitalism and Schizophrenia* makes the general argument that the trend of history is indexed by increasing schizophrenia and deterritorialization. But this has the effect of performing what D&G call a (materialist) critique of the transcendent use of syntheses (schizoanalysis). This argument cannot be understood in the absence of other work that has been co-assembling with D&G, most especially, in the analysis of non-linear systems. Non-linear or immanent systems are problematic objects (not necessarily capable of mathematical modelling). Linear or transcendent systems are a special case of non-linear systems obtaining under specifiable conditions. More concretely, in linear systems, the phase portrait of the system is geometrically stable, and the system itself tends towards the long-term occupation of a single region of its phase space, often a point attractor. Non-linear systems, by contrast, have unstable phase-space portraits in which attractors are dispersed, and whose (already complex) geometry may itself by reprogrammed by the behaviour of the system. This vocabulary of attractors (and repellors) used to describe gross geometry of phase-portraits is developed from the account of the machines for the production of production at the beginning of *Anti-Oedipus*.

This description of linear systems uses modelling terminology derived from the study of non-linear systems. It permits the understanding of what feature of linear systems leads them to be thought transcendentally: the diagnosis of the philosophical error of transcendence. The unusual stability of the attractor state invites the interpretation that the system is suspended (transcendentally) *from* the attractor as governing concept, end or origin ('a dead rat's ass suspended from the ceiling of the sky' as Artaud wrote). In fact, the stability of the attractor is an unusually uninteresting exhibition of inhibited self-organisation. It also permits an understanding of the primary temporal trajectory of systems: the deterritorialization of transcendent systems. Understood transcendentally, a stable attractor state is retrodicted back to the front of the system as its cause (and simultaneously evacuated from nature into the realm of transcendence: representation, mentality, etc.). The only

material correlate such a retrodiction can have is in the present level of organisation of the system, or its neg-entropy level. This level is, however, precisely what is itself subject to thermodynamic dissipation. Thus stable structures (understood transcendentally) tend to corrode through time.

This paper uses a thermodynamic reading of D&G's schizoanalysis to approach the most basic instance of transcendent organisation (from which the very term organisation is taken): the organism. According to the above structure, the challenge is to link the following propositions: the biogram has always been a machine. (D&G draw attention to this with the term machinic phylum); the biogram is becoming-machine. That is, the biological has always been immanent to its material (machinic) conditions of production, just as the nation-state has always been immanent, just as linear systems in general are special cases of non-linear ones. There is no extra order of specificity that distinguishes the biogram from the machine. Life is an impersonal engineering problem, the matter-machine subjecting itself to iteration. the supposition of a specific difference (life/non-life) is a philosophical error of dialectical transcendence. And yet, the biogram is also chronically becoming-machine. This last proposition is of particular importance. The becoming-machine of biogram is the synthesis of the two most elaborated complex systems with the terrestrial ambit–biological evolution and market capital. For evolutionary products, this synthesis can be thought only as catastrophic and probably lethal expenditure of organisational neg-entropic reserves.

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**5-C-3: Matthew Fuller (PO Box 3285, London, SW2 3NN, UK: matt@axia.demon.co.uk)**
*Theory is a subset of action (Workshop)*

When theory is contaminated with other forms of action it works best, & differently. The workshop will be based around discussing the micro-tactics of engineering potential & actual processes of mixing different forms of action. I will preface the discussion with an introduction to the things I & others are up to which to a certain extent play with this contamination, though by no means define it. Some of these are, involvement in: the production of *Underground*, a paper of critical cyberculture etc; the production of *I/O/D* an interactive e-zine distributed via networks; the organisation of events such as *MEDIAJAM*; etc.
**Key words:**
20 steps to hot deterritorialized action>> border zones>> playing with context>> crashing control>> anti-economics, or, if free trade is the interchange of materials minimising imposition by the economy?>> lifestylism & oppositionality>> open your mind, close the university

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# Phantasies of the Dying State                          5D (HO.51, 4:10 - 6:10)

**5-D-1: McKenzie Wark (Macquarie U., Media Studies Dept., Australia: mwark@laurel.ocs.mq.edu.au)**
*What Does Capital Want? The Infobahn Fantasy*

Although it disappeared almost as quickly as it arrived, the media spectacle of the 'information superhighway' or infobahn was a remarkable instance of contemporary speculative corporate rhetoric. This paper examines the way the fantasy of the infobahn served as a means to construct an imaginary scenario of the re-commodification of culture via new media. This packaging of culture in turn served as the rhetorical draw for the construction of an image of a community of consumers. This in turn could be marketed by its corporate purveyors to their bankers and investors as a means of attracting investment in the imaginary scenario of cyberspace. This paper traces the 'brokerage' of such corporate-rhetorical strategies around new media technology through the business press and popular media, and examines the role of government in anchoring the referents of the fantasy. As such it is a case study in the intensive redevelopment of the landscape of corporate culture in the 90s, where the classical figures of commodity fetishism and the spectacle meet a theory of fantasy derived from Slavoj Zizek.

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**5-D-2: Christian Erickson (U. of California - Davis, Dept. of Political Science):** *Networks of Power/Strategies of Resistance: The Cybernetic Panopticon and the Public Sphere in the United States Late 1960s to Present*

This paper traces the historical evolution of cybernetic systems of observation and surveillance in the United States and in areas of the world where the US was involved in "counter-insurgency/subversion" warfare (i.e. Army Intelligence gathering systems which occasionally used the early version of the ARPAnet to transmit date, the information processing routines used by the FBI in its COINTELPRO ops, the computer system installed by the FBI in Saigon which was used to "run" the Phoenix Program) and "strategies of resistance" used to disrupt the deployment of these panoptic technologies. The paper then examines current systems of observation/surveillance such as the US Treasury Dept.'s FinCEN (Financial Crimes Enforcement Network), CIA's DESIST database, the "Clipper/Capstone/Tessare" proposals of the National Security Agency, and briefly investigates the impact of the Oklahoma City Bombing on the push for a possibly dramatic expansion of monitoring of the Internet and other "modes of communication". After laying down a basic historical narrative the author uses the theories of Deleuze and Guattari, Manuel DeLanda, James Der Derian, Foucault, Lyotard, Habermas, Haraway to analyze the "meaning" of these surveillance technologies, the degree of threat they represent to the "public sphere", and what strategies of resistance have been, and will be effective in the new terrain of social contestation of "cyberspace".

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**5-D-3: Bernd Herzogenrath (Institut fur Anglisitk, Aächen, Germany)**
*Ghosts Beyond the Window: Break in & Enter*

The piece is based on the following cornerstones: The Prodigy's *Music for the Jilted Generation*, William Gibson's *Neuromancer / Mona Lisa Overdrive*, and William S. Burrough's *Nova Express*. My frame is 'simply' to go from the 'Intro@ of The Prodigy (which evokes in my mind the image of Burrough's working on his typewriter) to the notion of the 'underground' (a 'machinic underground' that establishes itself as a 'rage of the machine against the machine'); explore the references to Voodoo in Gibson (there is a connection to the track 'Voodoo People' on the Prodigy CD) as well as the connections to *Wuthering Heights* (...HEY!!...) at the end of *Mona Lisa Overdrive*, and from that draw a connection to Bataille's notion of

'evil' as a pre-symbolic force (Prodigy tracks 'Break in & Enter,' 'Their Law'), and then draw a connection to the Criminal Justice Bill that criminalizes Techno Raves...you see, it's quite a hallucinatory frame, but nevertheless....

## The Future of the Flesh & its Brain                   5E (HO.52, 4:10 - 6:10)

### 5-E-1: Barry Lewis (Stavanger College, U. Centre of Rogaland, Norway)
*RAM, REM, RIM, ROM, RUM: or Thanks for the Memories*

The computer concepts of RAM and ROM are basic to the way we think about the structure of data. These notions, however, need to be supplemented by three other acronyms if our relationship to technology is to remain a healthy one. We should concentrate on RIM (our Role in Interfacing with the Machine). Cyberspace is a swamp which sucks you down the moment you enter it. It eats up time and disgorges selves. To prevent our virtual futures from dissipating in the actual present, we have to develop REM: a quick glance away from the screen towards Random Extrinsic Materials (texts, notepads, chance events, the room) which proves we are very much awake. Lastly, we must exercise our own memories. There is a need to develop the "buffer" of short-term memory through the use of RUM (Repeated-Use Mnemonics), if our screen time is not to be wasted.

### 5-E-2: Constantine Romanos (U. of La Verne, Athens Campus, Humanities Dept.)
*The Resilience of the Real: A User's Guide to Cyberspace for Human Beings*

All potentiality aspires to becoming actuality, but for the most part fails in its endeavour, since there naturally exist only a limited number of actualities corresponding to an indeterminate number of potentialities. The technically-generated "virtual reality" is another potentiality, as once religion, politics, and drugs were, and many people hope that it will be successful.

The recent philosophical debate on the notion of the "simulacrum" converges in the demand to "overturn Platonism," that is in depriving the original of its ontologically-privileged status over the copy. Philosophy, after having succeeded in reforming itself thus, may now be permitted to move closer to the paternal protective power structure of postmodern techno-capitalism. As art earlier in the century succeeded in surviving by aligning itself with industry to break the resistance of the human senses against ugly machines by embellishing their exterior in the process known as industrial design, philosophy now hopes to survive by breaking the resistance of the intellect against the onslaught of computer-generated worlds in search of—paying— human inhabitants. If the "real thing" is not a cent worthier than the copy, surely it is totally irrational to insist on resisting being fed the copy.

Obviously enough, after the distinction "original-copy" is gone, a corresponding distinction must also go: that of organism-machine. This will break all intellectual resistance against the attempt to cyberneticize the human being on the plane of what we still call reality—to rid man of his death-anxiety, presumably. Following my earlier work on Henri Bergson's philosophy and its anthropological implications, I intend to approach the paradigm of "virtual reality" with the unfashionable, value-ridden and admittedly rather vague but nonetheless still significant concept of alienation. I shall attempt to demonstrate with Bergson how the decomposition of a living totality in homogeneous fragments and its subsequent recomposition into a simulacrum of the same, pathologically affects the human faculty of perception of inner states of consciousness on the one hand and of the world as a physiognomically significant totality on the other. Finally, I shall attempt to show that an eventual upturning of Platonism does not necessarily destroy the validity of the concept of the real and its opposite.

### 5-E-3: John Pickering (U. of Warwick, Dept. of Psychology: j.pickering@warwick.ac.uk)
*You Can't Beat Meat*

Around 1930, Walter Benjamin asked: "What is to be the fate of the work of art in the age of mechanical reproduction?" His answer was that the unique space-time presence that confers authenticity on a work of art cannot resist dilution by infinite reproduction. Now, as authenticity and presence both diversify and multiply over the Net, we ask a question that complements Benjamin's: "What is to be the fate of meat in the age of cybernetic replication?" Our complementary answer is that embodiment, an expression of a unique evolutionary presence, means that while electronic mimesis may extend sentience it will not make the body extinct.

From the Buddha to Bourdieu the same story is recognised and retold: sentience is indivisible from embodiment. This may be obscured as the Net multiplies and recursively embeds the signs from which human identity is constructed. It may appear that the signs could themselves become a vehicle for sentience. But for all that human meat is so stuffed with signs, semioticians from Baudrillard and Bohm show that embodiment is bedrock. Even Teilhard de Chardin, who foresaw how the Net would enmesh and organically integrate with the human psyche, did not trash the body. For him, the next phase of evolution was to be a coming together of embodied individuals, not an outrush into disembodied, migrant subjectivity. The psyche would remain obdurately enmeshed in flesh. The mind's meaty vehicle cannot be spilt on air.

As artificial life supplants artificial intelligence and as, in McLuhan's terms, communication on the Net shifts from cold to hot, so it becomes clearer that embodiment rather than information is the precondition of sentience. For cybersex to be pleasurable, there have to be real as well as virtual bodies. The Net may offer multidimensionality and memory but for directionality and desire, you can't beat meat.

## Sunday May 28

**January 1, 2001**                    **6A (Panorama Room - 2:45 - 5:45pm)**

**6-A-1: Stephen Pfohl (author of *Death at the Parasite Café* & Boston College, Dept. of Sociology)**
*Orphans in the Net: Virtual (Cultural) Reality, Whitemale Power and the Ruins of Cybernetic Capital*

This mixed-media performance text uses video, slides, pre-recorded sound and its author's voice to explore the emergence of cybernetically mediated consumer culture. Posing the question of whether it is better to be sociological orphan than a mutant child of the techno-mediascape, "Orphans in the Net" explores aspects of the gendered, racially marked and economically driven ritual structures of cyber-Capitalist cultural practices. What does it feel like to be penetrated by liquid capital. Is it like shedding a tear, only in reverse? This text opens with an allegorical meditation on its authors childhood amidst a world of "screened memories" and concludes with a speech given by the Black Madonna Durkheim to a televisionary assembly of orphans gathered at the Parasite Cafe.

**6-A-2: TechNET (London)**
*Techno: Psycho-Social Tumult*

*Sound invades us, impels us, drags us, transpierces us...it takes leave of the earth...It makes us want to die. Ecstasy and hypnosis. Colours do not move a people. Flags can do nothing without trumpets.*–Deleuze & Guattari- *Thousand Plateaus*

*TechNET* is a multi-perspective affirmation of techno that seeks to elaborate and propel the continued outbursts of psycho-social tumult that this music is creating. Never numbered or dated, each issue of TechNET could be the first or the last. Always at a beginning and always incomplete, TechNET is a "glorified flyer" that is given away at parties, deposited in record shops and sent out along the third rail. What follows are re-mixed and re-connected compositions sampled from TechNET tracks:

*POSITIVE FUTURISM*–We could begin anywhere.
*NO MORE WORDS*--Techno music opens a space for a critique of language or at least it raises the issue of power inherent in language.
*WHAT IS HEARD IN SOUND IS THE NON-FACE*–Techno is an open secret, an anonymous pool of power
*INSIDE THE CROWD*–Techno parties have no centre, no focal point.
*CRACKDOWN*–Those organisers of opposition to the Criminal Justice Act focus on the injustice of the state but we wish to explore the poetics of altered States.
*INTENSIFIER*–11pm. Cross the threshold into countless doorless rooms...the shattering of the mirror travel...

**6-A-3: Zero-K (Nick Land (U of Warwick, Dept. of Philosophy: pyrbx@snow.csv.warwick.ac.uk) & Sadie Plant (U of Birmingham, Dept. of Cultural Studies)):** *Smearing Systems*

Identity is virtually extinct. The security systems familiar to modernity - nuclear, stable, & protective - are smearing into disruptive interference patterns. Orphaned by cybernetic culture, planetary technocapitalism's twisted offspring scramble generational order, fatally blurring the boundaries of race, nation, class, & sexuality. The OK virus infects reproduction, switching it to lateral replication. Normality becomes dysfunctional. Immunity eats itself. Community dissipates.

Socialism was the last hope for mankind, but that's all over now. As identitarian policing comes messily apart, a real (rather than epistemological) vagueness - rigorous but anexact - dissolves the Read Only False Memory Syndrome of anthropomorphic history. Tomorrow flattens into a zone of peripheral disorganizations & queer amnesias. Out in the jungle tracts of the near future, humanity is just a phase.

**6-A-4: O(rphan)d(rift>) (London)**
*Death Simstim*

We are O(rphan)d(rift>). We propose a demonstration Death Simstim for VF95. A Death Simstim is the simulated system for our deaths. It is an abstract machine that intensifies our recoding process. It operates on the human 'life' code, once you have entered the space of intense loss—virtual Flatline. It processes the human subject across fields of binary coding surfaces. You can be accessed and recoded whilst in a state of possession. O(rphan)d(rift>) specialises in possession through Techno music. We enclose a transcription of two individuals opened onto this space, in order to convey through language.

Death Simstim will be an experiential audio/visual narrative maze, involving two Orphans speaking with Boss 50, Techno, a strobe animation video environment back projected with a video projector and slide projected texturing. In order to cut off the individual history of each person, two other Orphans will deal with detailed enquires from the audience towards the end.
About O(rphan)d(rift>):
O(rphan)d(rift>) is.
O(rphan)d(rift>) online.
O(rphan)d(rift>) cyberpositive.
O(rphan)d(rift>) process.
O(rphan)d(rift>) strange attractor.

O(r   n)d(rift>) inevitable.
O(rphan)d(rift>) viral.
O(rphan)d(rif   zone of intensities.
O(rphan)d(rift) identities dispersed.
O(rphan)d(rif   screen bleed.
 r ph n   t>) not alien to the
      psychological demands of capitalism
      that mutation replace integrity.
O(rph   ) > inside out.
O(       ( facelessness.
O(rphan)d(rift>) swarm.
   p   d f   unconditional opportunism.
   d     t> facilitated by onto genetic street roaming mutants.
O.d.   reality exceeds the artist.
   d                    Zero

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# Information Surplus                                   6B (S0.21, 2:45 - 4:45)

### 6-B-1: Kim, Sang-Koo (Pusan National U., Dept. of English, Pusan, South Korea)
*The Interpretation of Noise in a Literary Text Based on a Unified Theory of Neurophysiology and Neuropsychology*

Based on neurophysiological theories or perspectives, I conducted field research on high school students, and from it I proved that the constructive function of noise has its own relevance. Then I point out that for this matter neurophysiologists' perspectives of noise correspond to neuropsychologists' views: Jeremy Cambell's view of a human being's cerebral neuron's function of 'utterances of prediction and unprediction', Michel Serres' assertion of man's 'existence as an individual's total chemical response, that is, as background noise', A. Darnasino and H. Damsino's notion of 'brains's storage of experienced information and brain's categorization of information, and Hoffmann and Honecks view of the transformation of nonsense into information.

From this an assumptive unified or integrated perspective of theory is established. On the basis of the perspective its application has its own objective in expounding the complex function of language stuffed with what is called noise. To prove its relevance, I seek to disclose the role of noise in the novels of Donald Barthelme and Don DeLillo.

On the other hand, this application of such a perspective is quite similar to that of Gilles Deleuze and Felix Guattari's prediction of the future of the postmodern condition. Deleuze says that in order for meaning to occur identity must exist within difference, or better, each must exist with the other. I would therefore argue, paradoxically, that the real value of a literary text must be measured in proportion to the extent of noise.

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### 6-B-2: Alexander Chisienko (Cambridge, USA: sasha1@netcom.com)
*Future as distributed intelligence*

The advent of the Mind Age of intelligent machines will bring profound transformations in global social and technological structures and relations of an advanced intelligence to its environment. The ability of future machines to directly share experiences and knowledge with each other will lead to evolution of intelligence from relatively isolated individual minds to highly interconnected structural entities. The development of a network of communicating mobile and stationary devices may be seen as a natural continuation of biological and technological processes leading to a community of intentionally designed and globally interconnected structures. The growing reliance of system connections on functional, rather than physical, proximity of their elements will dramatically transform the notions of personhood and identity and create a new community of distributed "infomorphs" - advanced informational entities - that will bring the ongoing process of liberation of functional structures from material dependence to its logical conclusions. The infomorph society will be built on new organizational principles and will represent a blend of a superliquid economy, cyberspace anarchy and advanced consciousness. The new system will incorporate many of today's structures and will develop new traits transcending the limits of human understanding. Its evolution will evade human control, but relations of descendants of humans and today's machines will be largely symbiotic and will lead to the emergence of a new ecology of intelligence.

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# Lacerating the Map of the Future          6C (Library Room 1, 2:45 - 5:25)

**6-C-1: Diane Beddoes (U. of Warwick, Dept. of Philosophy):** *Abstract Woman*

Capital is no longer financed by wealth produced in the past but by wealth anticipated in the future. Perpetually revolutionizing its own modes of operation in order to finesse its mechanisms of anticipation, it has invented financial engineering instruments of an increasingly complex and abstract nature.

'In a sense it is the bank that controls the whole system and the investment of desire.'--*Anti-Oedipus*.

The recent collapse of Barings bank discloses another aspect of banking operations. No longer functioning as agents for other players in the market, controlling the investment of desire, they have themselves become principals, playing speculative games with the future, desiring on their own account. The creation *ex nihilo* of positive money no longer funds the productive economy, generating a debt external to the banking system, but turns the bank into a debtor itself.

Banks have always collapsed. What Barings brought out into the open, however, is the inherent and systematic instability in a banking system which gambles on the future, and which is thus no longer brokering or controlling the investment of desire, but trading in it. Using Barings, and the discussions its collapse gave rise to as a concrete example, this paper explores the specifically capitalist intensity of machining and returning its surplus value to the propagation of its own operational culture, and the impossibility of anticipating the outcome of this positive and self-organizing feedback process.

**6-C-2: J. Jason Charnesky (The Pennsylvania State U., Dept. of English: jjc10@psuvm.psu.edu)**
*The Fourth Person Singular: A Deleuzian Topography of Cyber(Hyper)Space*

"Body-sieve, fragmented body, and dissociated body– these are the three primary dimensions of the schizophrenic body." The fourth dimension of the proposition, according to Deleuze, is sense; and its mode is that of the fourth person singular. Three dimensional space, and the geometry which describes this space, constructs a world of objects where embodied subjects contemplate a world through "rational" thought, a Euclidean rationality marked by the logical rigor and argumentative coherence of the very text which taught it, Euclid's Elements. The development of hyper-dimensional geometries in the nineteenth century provoked a hyperspatial philosophy which seized upon current mathematics to provide metaphors for a transcendental subject unbounded by either Euclidean space or its rationality.

The late twentieth century has seen a similar appropriation of maths in the service of transcendence. The hyperdimensional has become the hyper-real, and hyperspace has become hard wired as cyber-space. The new hyperspatial philosophy holds out the promise of disembodied freedom, the glamour of anarchy, with modem as totem of the modern free spirit unencumbered by location in 3D space. Within this space of "Blanchot list-serves" and "MOO sex rooms", hyper-rational disembodied presences are supposed to flow – following the intensities of their desire. In practice, the hard-wired transcendental of the Internet encourages and reifies a politics of identity, a confab of telnetted subjects owning and flaunting their assumed gender or their e-mailed nationality. "Cyberspace" has become another turf for the Web's home-paged race hate or the downloaded virtual dildo. From Stormbreak's NeoNazi ressentiment to Lambda MOO's tediously virtual S & M, the promise of the hyperdimensional in the mode of the impossible fourth person singular has been grounded, and run aground, in high tech displays of Euclidean rationality.

But the impossible possibility of the fourth person singular remains. The territorial reign of the celluar "self" (and history as a histology of those cells) can be interrupted. Information technology can permit language to be the virus Burroughs imagined. The pre-personal agent, the singularity which moves over that surface of inscription is not a cell but a constituent element, an organelle upon whose surface the codings of production and reception occur, a ribosome of the cellular body politic. The fourth person singular implies a ribosomal politics, which we find in the minor literatures of Rochester's Sodom and Longfellow's Judas Maccabaeus. Ribosomes, denatured high priests, phallomaniacal Sodomite kings, and Deleuze's fourth person singular –these the *dramatis personnae* of a possible virtual future.

**6-C-3: Michael Hardt (Duke U., Literature Program: hardt@acpub.duke.edu):** *Expose the Flesh*

This presentation begins with a translation of a poem by Pier Paolo Pasolini, "Crucifixion" (1948). The poem is followed by a brief essay on the fullness of the flesh and its erotic and ethical implications. Pasolini tells us we have to expose ourselves– this is the lesson the poor nailed-up Christ teaches. Exposure (rather than transgression) leads us to an ethics of abandonment to the flesh, an ethics of the affirmation of this world, the intensities of this naked life. Incarnation is the exposure of divinity in the flesh and the emptying of any transcendental separation. The plenitude of materiality, the fullness of existence is divine. But why should we even speak about divinity here when the transcendental form of God has been completely emptied out, abandoned to the flesh? Because divinity marks the essential vitality of existence. Divinity resides precisely in the boundaries or thresholds of things, at their limits, passionate and exposed, as if surrounding them with a halo. Incarnation is also, and above all, an ethical injunction: empty yourself, become flesh! How little we have realized of our flesh. We don't yet know what flesh can do.

# Questioning CyberPunk

**6-D-1: Svetlana Mintcheva (Duke U., Literature Program: svetlana@acpub.duke.edu)**
*Cyberputsch: Cyberpunk's Subversive Desires*

The paper is an attempt to outline the conditions of possibility underlying the critical tug of war between celebrators and Jeremiahs of cyberpunk, the former reading it as radical critique, the latter as one more emanation of multinational capitalism. The parameters of my search are set by: first, a First World market in a panic run from the banal towards what it loves to call "subversion"; and, second, a leftist academia enabled and also plagued by deconstruction where the human is re-thought in its series of problematic binaries. Binary series of high/technologically sophisticated/cultural versus low/natural/primitive are collapsed into networks of endless deferral, however, that process stops short of the politically central binary of oppositional or revolutionary versus corporate and oppressive reflecting a certain incapacity to make a radical break with past political structures of thought. Market euphoria, nostalgic politics and dreams of aesthetic radicalism outline the field where our virtual futures are reluctant to part with the bodies of our material pasts.

**6-D-2: Pat Cadigan, (author of *Synners, Patterns, Mindplayers & Fools*: Cadigan@aol.com)**
*What Is The Question?*

The search for answers is not nearly so important as the search for the right questions to ask. As the boundaries between personal reality, virtual reality, and street reality show signs of blurring and perhaps breaking down altogether at least in spots, how do we find the right questions to ask in order to obtain information that is true knowledge rather than factoids.

**6-D-3: Graham Head (Birkbeck College, Dept. of English: Graham@nunhead.demon.co.uk)**
*Telling the Future Through the Past? A View Through the Steam . . .*

'Steampunk' is a small but interesting sub-group within cyberpunk science fiction. It is made up of a group of texts, of which the best known is probably William Gibson and Bruce Sterling's *The Difference Engine*, which posit and are set against an alternate historical past. Developing in part from more traditional sf 'alternative histories' such as Philip K Dick's *The Man in the High Castle*, these works share stylistic and technological concerns with other, perhaps more well-known cyber fiction.

In this paper I discuss a selection of these novels in terms of the differences they establish between their own narratives and our known, 'real' histories. Such readings can, I suggest, illuminate the strategies and inscribed desires of other cybernetic fictions and some current commentators on the implications of future technologies - the gap between the present and the projected future being mirrored to a degree by that between known history and the imagined. In developing these readings I also rely upon and explicitly test the notions of reading protocols and the sf 'mega-text' - as developed particularly by the writer and critic Samuel R. Delaney - as an approach to the understanding of science fiction and related texts.

**The organizers of Virtual Futures 1995 (Dan, Eric & Otto) can be reached at:**

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**Fax:** (01203) 523-019
**Post:** Virtual Futures, Dept. of Philosophy, U. of Warwick, Coventry CV4 7AL, England
**Or:** through the Panorama Room registration desk throughout the weekend.

**Disabled Access:** *Panorama Room:* elevator is at the far side of Rootes Reception Building from the Student Union, opposite Benefactor's Lounge. *Library:* can only be accessed through Modern Records Centre, behind Library: go to the porter's entrance (under bridge connecting Library & Modern Records Centre), knock, & proceed to the lift & up to the 1st floor, to Library Rooms 1 & 2, & to F1.07 in the Engineering Building, out the main Library entrance & across the bridge. (see map).

**Buses:** From Coventry or Leamington Spa, take the # 12, 12A, 12B, 12C, X12, or 112 bus to the U of Warwick campus. Fare should be 50p or 55p each way, £1 roundtrip. Sunday morning: 1st bus from Coventry gets to campus at 10:45am, from Leamington at 12:15pm. If you share a taxi between 3 or 4 people, it should only be £1-2 each.

**Taxi numbers:** 2 local taxi companies can be reached at 222-555, 666-666 & 555-555. Taxis are approximately £5-7 from campus to the Coventry railway station & the hotels nearby.

**Food:**
    Dining Hall - Rootes Building - 1st floor
    Harvey's - Students Union - 1st floor (sandwiches, pasta, beer)
    Snack Bar - Students Union - ground floor
    Entertainer - Arts Centre - ground floor

**Drink:**
    Staff / Graduate Bar - Rootes Building - directly opposite Panorama Room
    Airport Lounge - Rootes Building - 1st floor
    El Cholo - Students Union - 1st floor
    Arts Centre Bar - Arts Centre - 1st floor
    The Non-Smoking Bar - Students Union - ground floor

**Programme Designed and Edited by:** Otto, Dan & Eric
Cover image by: O(rphan)d(rift>)
Cover layout by: Peter Jordan

**Although we like to think we've done this all ourselves, many, many thanks for their help over the past 6 months are due to:** nick land, sadie plant, greg hunt, rhonda wilson & amanda loy-ellis (seeing the light), w.s.b., evelyn wilson (the lighthouse), laurie hayward (west midlands arts council), julian blom, rachel armstrong, ian o'donoghue, carey young (carey@bartlett.ucl.ac.uk), j.g. ballard, peter dunn, michael carr, death cigarettes, the kronenbourg brewery, O(rphan)d(rift>), al shulgin, kath jones, robin mackay, joan dixon, heather jones, josie williams, julia brown, debbi deely, martyn amos, malcolm clarke, ben greenaway, sandy moffat, harry hingle, lisa haskel (ICA), maggie roberts, matt fuller, rissy ruddy & of course, the eye.

And don't forget >>>                                                                                      <<< And don't forget

# Virtual Futures 1996

**May 1996**
**@**
**University of Warwick, Coventry, England**

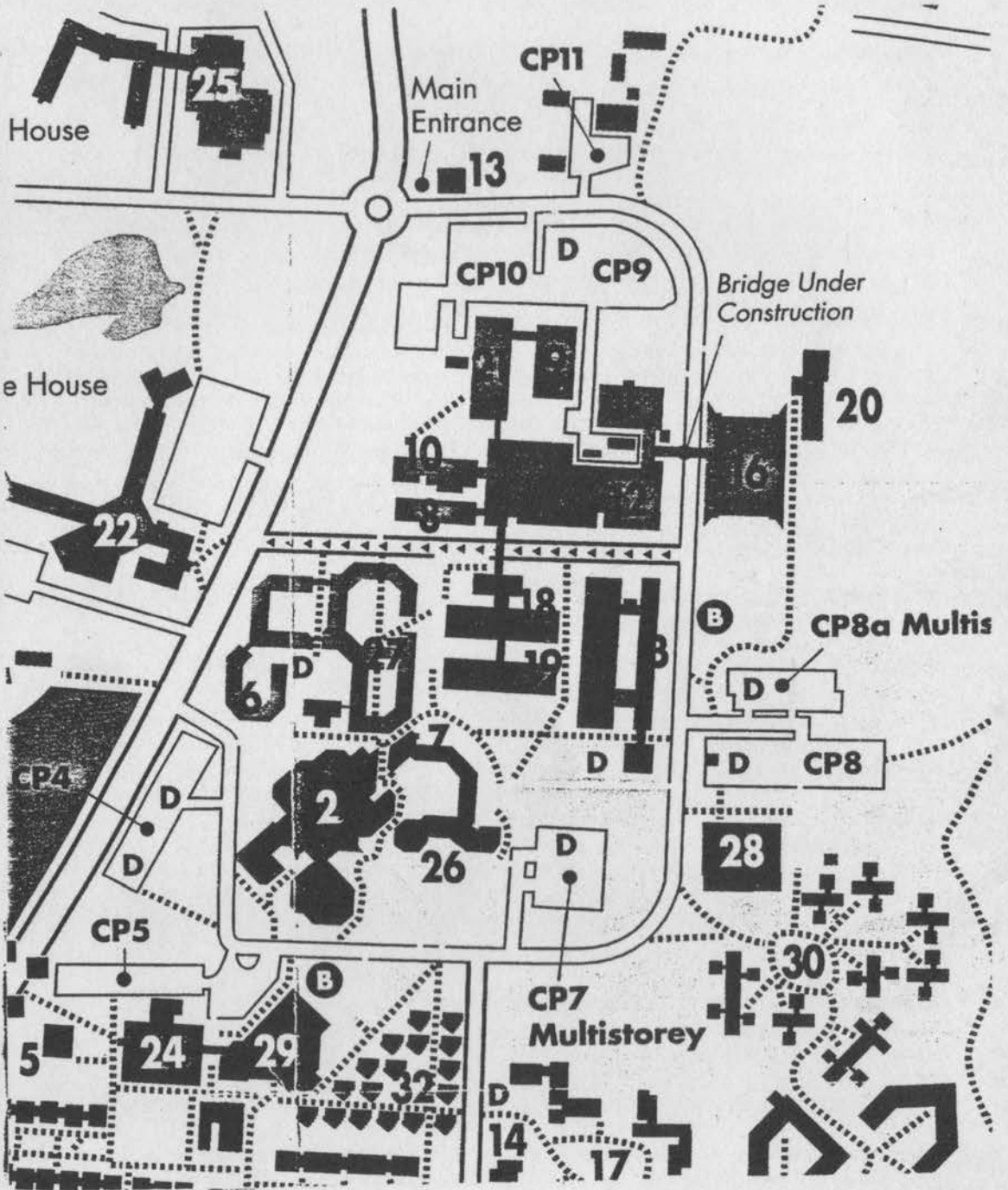**write virtual-futures@warwick.ac.uk for details**

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# Virtual Futures 1995: Cyberevolution

## May 25-28th @ the University of Warwick, Coventry, England

House

e House

Main Entrance

**CP11**

**13**

**CP10** D **CP9**

Bridge Under Construction

**20**

**25**

**22**

**10**

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**B**

**CP8a Multis**

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D **CP8**

**CP4**

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**26**

D

**28**

**30**

**CP5**

B

**24**

**29**

**32**

CP7 Multistorey

**5**

**14**

**17**

| ROOM | BUILDING # |
|---|---|
| Panorama Room | 24 |
| S0.21 | 27 |
| Library Rooms | 18 |
| H0.51 | 3 |
| H0.52 | 3 |
| F1.07 | 12 |
| Arts Centre | 2 |
| Computing Services | 10 |
| Benefactors Lounge | 5 |
| Students Union | 29 |