8/OPEN PROCESSES
OPEN DOORS

"If you have enough rice, even if there are heavy rains and thunderstorms, you can eat without going out to work. Those who have only money can only get hold of things for daily life by buying them."

Abaw Buseu, from the film
Virtual Borders (Manu
Luksch, 1999)

B/OPEN PROCESSES
OPEN DOORS

MAKE IT SNOW! MAKE IT SNOW! MAKE IT SNOW!

Manu Luksch
2008

Europe's mountainous regions currently feel the effects of climate change more dramatically than the lowlands. Temperatures are rising proportionally higher, glaciers are receding, biodiversity is threatened, snowfall is lower, and avalanches and mud slides are more frequent.

In order to maintain winter tourism — the primary business in most of Europe's mountainous areas including the Alps and the Pyrenees — the first few snow cannons were introduced about 25 years ago. Today 80% of Italian Alpine resorts, and 65% of the Austrian and French ski slopes make use of artificial snow to provide the white landscape advertised in travel magazines. Artificially-produced snow costs €2/m^2 every season (much of which comes from EU funds), and importantly, consumes huge amounts of energy and water. The snow cannon epitomizes how humans cover up and even exacerbate ecological problems in order to fulfill frivolous desires.

Make it snow! make it snow! make it snow! is a (very) short meditation on the manipulation of winter landscapes for tourism that points to their fragility and recalls the need for a holistic perspective.

Siraj Izhar
2008

PARALLEL PROCESSES AND CULTURAL ECOSYSTEMS

Processes are the vehicles of change; equally processes are instruments for preventing change. Whilst the image and talk today may be that of a fast changing world, at the structural level, reality is much as it has been: that is, the members of the G8 nations and the Security Council are still the same, the demographics of financial power and the balance of trade between rich and poor nations barely shifts, greenhouse gas emissions continue to rise along with the rate of global deforestation, and so forth. At the structural level, change remains the hardest currency and it could be argued that the only forms of change possible are those that augment the present structures.

The reality of grid-locked structures at a time of heralded change mediated by communications technology was encapsulated in the 1990s by the acronym TINA: 'There Is No Alternative' (to change). In truth, 'There Is No Alternative' stood for the paradox of the epoch: the change that is the obverse of change. What is further intriguing is that TINA as a concept began life in a previous generation at the Shell Centre at London's South Bank, the headquarters of Royal Dutch Shell. Here in the 1970s, the French executive Pierre Wack instituted a practice of 'scenarios thinking' as a means of generating scenarios of change in the global marketplace. The art of scenarios thinking drew heavily on Wack's interest in the mystic traditions of India and Japan, above all in the writings of Gurdjieff. To 'contexts of accelerated change, greater complexity and genuine uncertainty'[1], Wack employed a methodology drawn from the historian Fernand Braudel's concept of 'conjunctural history' that mapped combinations of movements in history, with short-term rhythms and long durations spanning centuries. Within the long durations, Braudel had identified the forces he saw as being unstoppable or undeniable, what he called the 'tendances lourdes'[2].

Pierre Wack's practice of scenarios thinking (nicknamed 'the yoga of perception' in corporate culture) conceived a future built around the 'tendances lourdes' to shape the corporate strategies of Royal Dutch Shell at the projected end of one of Braudel's long durations. Historically this coincided, through chance or by calculation, with the explosion in the price of

[1] Pierre Wack *Scenarios: Uncharted Waters Ahead* (Cambridge: Harvard Business Review, 1985). Publications by Pierre Wack are largely out of print though there are numerous references online. Shell's website www.shell.com devotes several pages to scenarios thinking.

[2] Fernand Braudel *The Perspective of the World: Civilization and Capitalism 15th–18th Century Vol. 3* (New York: Harper and Row, 1982)

crude oil in 1972, a decade of ensuing recession and the dawn of the informational age. Through chance or through calculation, Wack's methodology reaped dividends for Shell. With the years the 'tendances lourdes' translated itself into the marketplace as the three inseparables 'Globalisation, Liberalisation, Technology', and went on to become an ideological instrument for restructuring society in its wake: TINA.

The logic of TINA applied to the arts has in its turn produced the space of the globalised art market. Through the 90s, contemporary art 're-valorised' itself in alignment with the market through a conflation of private and public institutions, along with a retrenchment into orthodoxies of authorship and commodity. Art as a market became instrumental to the Culture Industry, incorporating or recuperating a wide spectrum of social processes. In this conflation, subculture, activism and art provide content through the same globalised process of a supply-and-demand chain in a buoyant 'representation' market, which ironically de-valorises the very thing that engendered the supply-line for marketable content: the social autonomy of civil processes. The term 'valorisation' extrapolates Marx's theory of the process of value production to describe the causal relationship between the new social dynamics and methods of creating market value in the information age. De-, re-, and over-valorisation, as used by globalisation theorist Saskia Sassen, show how the new realities of globalisation are umbilically tied to immense concentrations of wealth in a few key global centres[3]. The dependency on epi-centres applies as much to a representation market as to a labour market. With the accelerating movement of people, new patterns of social segmentation form in deregulated economies of informal zones and flexible labour.

This creates a new politics of diversity summarised by a fresh dialectic between a valorised representational market, a de-valorised informal labour market, and an over-valorised art market driven by 'super-profits' — a phrase used by Sassen to describe the speculative yet spectacular nature of globalised business driven by its financial sector. The art market symbolises this with its rising phenomenon of super-curators and blockbuster museums ringed by a supporting circuit of increasingly uniform global platforms, biennales and art fairs. In this value production spiral, alternative art practices have been faced with their own TINA, either short-circuited or recuperated by the growing market demand for representational content. The global Culture Industry now

[3] Saskia Sassen *Globalization and Its Discontents: Essays on the New Mobility of People and Money* (New York: The New Press, 1998)

harvests 'oppositional' culture with far greater efficiency for the representation market, with curated orders of 'marketable Others' in the new politics of diversity and informal processes. At the same time a parallel shadow industry burgeons in 'proliferating illegitimacies', in the social processes of everyday life that lie outside the managerial consciousness of the valorisation circuits. The illegitimacy of a parallel industry grows at the level of lived process, whereby, as Michel De Certeau would describe it, 'there is a rejection of everything that is not capable of being dealt with [...] and so constitutes the waste products of functionalist administration'[4].

Amidst this culturally mediated creation of 'value' and 'waste', the dimension of ecology applies more critically than ever to cultural theatres, and not just the natural environment. The publication of Felix Guattari's *The Three Ecologies* in 2000 provided an integrating template for the three interacting and interdependent ecologies of mind, society, and environment[5]. By defining the aesthetic paradigm as an ecological imperative, Guattari intimated a methodology for an art process amidst an industrial circuit-production of contemporariness. What he termed 'ecosophy' was presented not as an imaginary, but a necessary imperative, in other words an alternative 'There Is No Alternative', now evolving through an entirely different prism of reality.

Praxis as Process

To apply an eco-logic to a cultural or representational process, entails the deployment of strategies working across fields of different disciplines and contexts, perhaps describable in terms of a transversal space. Since its use in *A Thousand Plateaus*, the transversal has always conjured up futuristic images of virtual spaces, Temporary Autonomous Zones, instantaneous global networks; but applied to the here and now, the transversal is a messy complicitous process embedded in the real-politics of situated practice. This messiness is true to its roots, the transversal deriving from the exchanges in the mental space of a psychoanalytic process involving unavoidable contagion or transference.[6]

Applied to the theatre of public space, the transversal suggests the construction of processes that operate across conflicting terrain with uncertain outcomes: process as emergent process, process as an end in itself. Such processes

[4] Michel De Certeau *The Practice of Everyday Life* (Berkeley: University of California Press, 1984). The quotations here are liberally interpreted from the chapter on 'Walking in the City'.

[5] Felix Guattari *The Three Ecologies* (London: Continuum, 2000)

[6] Gilles Deleuze and Felix Guattari *A Thousand Plateaus* (London: Continuum, 1988). In the context of this essay it should be noted that the title *A Thousand Plateaus* itself drew from Gregory Bateson's 'plateau of intensity' as a means of resolving a double bind impasse. Deleuze and Guattari described it as 'a continuous, self-vibrating region [...] whose development avoids any orientation toward a culmination point or external end'.

constitutes 'praxis as process'. The aesthetics of praxis as process, that is the poiesis of praxis[7], lies in a methodology that involves simultaneous, parallel threads of engagement: threads of cultural process, economic process, legal process, environmental process. These threads connect through a praxis as process. The logistics of such praxis necessarily involves three operational factors: sustainability, continuity, autonomy. The three are interlinked, have no particular order, and may give rise to contradictions. But their acting together implies the self-creation of resources of some form to enable a process to reproduce itself; if this is not addressed the process would either reach a dead-end or surrender its autonomy. Within a praxis, the means of production and the means of representation are interwoven in a single process — that is, a praxis represents itself through its own autonomous sustainability and the way it navigates itself. This distinguishes a praxis of process from the modes of artistic practice whereby a prerequisite is a form of representation in another space. In such instance, production and representation constitute separate circuits that correlate to what the curator Nicholas Bourriaud has described in *Postproduction* whereby the art-work serves as a temporary terminal for a network of interconnected elements[8]. However, the telos of such work, its projected mode of production and consumption in reality fuels a contemporary game, a methodology of recuperation and counter-recuperation, recuperation and counter-recuperation… played out between artist and institution. Each step of a mutually valorising exchange progressively filters the work, as Art, as the 'absolute merchandise' — Marx's phrase for commodity value pushed to its logical extreme. This value-creation process has only the one market and reinforces the curating institution as the validating terminus.

An autonomous emergent process is something else. It is usually self-initiated, and whilst there is some affiliation to genres of public art or community art, it has to define its own theatres of operation. Constructing an emergent process as an end in itself requires its sustaining over several years so that it evolves through phases of production, (means of) reproduction and (strategies and tactics) of representation. These feed and grow out of each other; an emergent process need not leave a product. To illustrate such process in terms of a personal practice, three scenarios follow as examples:

1. In 1999, as a member of the ICC (The Intercontinental Caravan), I organised a march of the 40 Indian peasant farmers

[7] Humberto Maturana and Francisco Varela *Autopoiesis and Cognition. the realization of the living* (Boston: D. Reidel, 1973/1980) condensed the conflict between praxis (as action) and poiesis (as creation and production) through their hybrid term autopoiesis which Varela described as the 'autonomy proper to living systems'. Quoted from Felix Guattari by Gary Genosko in *The Three Ecologies*.

[8] Nicholas Bourriaud *Postproduction* (New York: Lukas & Sternberg, 2002)

[9] One account of the activities of the farmer's caravan whilst in the UK is provided by Katherine Ainger, 'Life is Not Business: the intercontinental caravan' in *We Are Everywhere: The Irresistible Rise of Global Anti-Capitalism* (London: Verso, 2003)

[10] David Bohm *Wholeness and the Implicate Order* (London: Routledge and Kegan Paul, 1980)

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*Flyer for post-*Expo Destructo *event at Strike, Fashion Street*

[11] The Fashion Street experiment ended in 2000, in sync with the regeneration of Spitalfields which saw the disappearance of a complex network of artist-led spaces and a thriving micro-entrepreneurial

we brought to the UK as part of the caravan. The caravan was a mobile protest against the WTO, Monsanto, and the corporatisation of agriculture through increasing dependency on the global seed market. The farmers' march from Brick Lane, in Spitalfields, East London to the Bank of England, in the Corporation of London, the heart of global financial power, was a small part of a pan-European project. The march itself did not provide the interpretive frames for its perception, other than the reality or spectacle of 40 peasant farmers, shouting 'WTO murtabad' ('Death to the WTO') surrounded by twice as many policemen on horseback or motorbikes. The farmers carried real estate placards – culled from the neighbourhood, advertising property around Spitalfields, now requisitioned for new use vilifying the WTO. There was no strategy to pre-represent the march for any market, either for artists or activists. The march itself was part of a continuity for farmers who had not been to the West before; its transversal properties as a medium lay in the self-framing potential of an alien environment by subjects at different ends of the geopolitical landscape[9].

2. Fashion Street was a 600 m² space set up in the mid 1990s. The space was divided into private, semi-private and public zones shared by artists (working mainly with digital media) and environmental and political activists. The thinking behind Fashion Street coincided with a long association with the physicist David Peat and his understanding of David Bohm's rheomode[10]. Bohm's rheomode is an examination of the noun-based structure of our language and cultural consciousness which in turn structures the way we perceive and act; a noun-based language structure contrasts with the verb-based structure of indigenous cultures like the Inuit, which defines their ways of interaction. Fashion Street was a highly active space, and whilst the work of both the activists and artists was of high profile, neither eclipsing the other, the crossovers and intersections between artists and activists remained discernibly separate[11]. Like the farmers' march where the activity had to be pre-framed for possible reification as art or activism, with the spectrum of activities at Fashion Street, the verbs stayed firmly in-between the nouns so to speak.

3. In 2000 the derelict public lavatory by Nicholas Hawksmoor's Christchurch Spitalfields was converted into a public space called Public Life. Public Life had a bar that provided the money flow to underwrite the building works. Through the 1990s, the derelict lavatory had been the base for a chain of sequential art projects lasting several years. This sequence

was built around the artist as an author-subject operating in a situationist urban space. By the late 1990s, Spitalfields was subject to intense property speculation in line with what David Harvey identified as cycles of capitalist engagement with the built environment[12]. In the wake of 9/11 and the opening gambit of the 'War on Terror', an underlying struggle intensified within multicultural urban space for possession of strategic turf through distinct agents: the Corporate City's New Spitalfields Market, the Bangladeshi community's Banglatown, and the neo-conservative Middle Class 'Georgian Heritage Spitalfields'. In that sense, the lavatory site occupied a pivotal position in market force terms, underwritten by cultural polarities.

Through the public lavatory's conversion, the intention was not to capitalise the development as real estate but to intervene in a contested context as a cultural process, one that amalgamated de-valorised and over-valorised forms of work publicly. Thus all Public Life activity, self-generated and unprogrammed, in mainstream or arcane genres, critically depended on the self-making of an internal labour pool through its cultural operations. Meshing service sector work (which underwrites the art market without visibility) internalised within a community (artists) brought up critical fault lines that were internal to Public Life as a process, whilst opposed to the external conflicts posed by speculative market forces[13].

This essay is not the place to analyse these projects individually but to distinguish the three in terms of distinct spaces of cultural engagement within a praxis as process: the public march was a single process that converged multiple social forces through a single action, but also a key temporary bridge to ongoing external processes; Fashion Street served as a host space for two distinct processes, arguably self-segregating, threaded through at the same time; Public Life as a public utility condensed conflicting threads of valorisation into a tiny capsule on a street pavement. Common to these autonomous processes was the construction of scenarios with conflicts internal to each.

An emergent process in its course generates such new spaces both internal and external; these have to be resolved solely through the means and imperatives of the praxis itself, by the way it propels, sustains and reproduces itself. An autonomous process has recourse to no other frames or appeal; its aesthetic sensibility is linked to its own trajectory, its autonomy and thereby its transversal potential. A useful

scene; inevitably this was paralleled by the redevelopment or emergence of large institutional spaces and new strategies of engagement through community out-reach projects.

[12] David Harvey, 'The Urban Process Under Capitalism: A framework for analysis' (1978) from Gary Bridge and Sophie Watson, eds. *The Blackwell City Reader* (Malden: Blackwell Publishing, 2002)

Public Life under construction

[13] Further information on Public Life, including press-cuttings and essays, may be found at www.publiclife.org

concept in the consideration of this autonomy is Guattari's 'coefficient of transversality' which he illustrated by imagining a field full of horses wearing adjustable blinkers that circumscribe vision. The coefficient of transversality is precisely controlled by adjusting the blinkers[14]. To sustain the continuity of an autonomous process over a length of time, the coefficient of transversality has to be weighed against the coefficient of (consume-able) visibility. The two things — transversal-perception and spectator-visibility — are entirely different entities and tools. How a process navigates between them in a live public theatre over time defines how it shapes itself in time and so intensifies or, otherwise, how it channels into given frames of representation (for example as art) or circuits of contestation (as activism). To further extrapolate: if a process dispenses with the need for its representation, this does not mean that it dissipates into nothingness, but that it is only recoverable in terms of the visualisation of a (cultural) ecosystem: an ecosophic totality that requires a different aesthetic undertaking, and a different notion of cultural circulation, exchange, and causality.

Circulation Modules and Cultural Quanta

In *Energy and Equity* Ivan Illich describes how high levels of energy (consumption) degrade social relations just as inevitably as they destroy the physical environment; to quote 'if a society opts for high energy consumption, its social relations must be dictated by a technocracy and huge public expenditures and increased social control; both rationalize the emergence of a computerized Leviathan'.[15]

For equity to have correspondence or representational value, Illich uses concepts of 'per capita quanta' and 'socially optimal energy quanta'. As our everyday lives are increasingly defined by capital-intensive forms of representation and communication, the concept of quanta is useful for the visualisation of an ecological dimension to culture. Illich uses the concept as a tool to figurate a balancing equivalence process bridging fundamentally different entities within one ecologic frame. Quanta are equally a means of adding new dimensional possibilities to the theatre of cultural production and transposing them onto existing structures of social reality. Deleuze and Guattari, in 'Micropolitics and Segmentarity'[16], use the notion of quantum flow as a means of overcoming the binary opposition that existing structures

[14] Gary Genosko *Life and Work of Guattari, From Transversality to Ecosophy* (London: Continuum, 2000)

[15] Ivan Illich *Energy and Equity, Ideas in Progress* (London: Marion Boyars, 1974)

[16] In Deleuze and Guattari (1988)

of 'segmented' reality derive from. Quantum flows 'reshuffle and stir up' rigid instituted segments through connection and conjugation across the extremes of scales, time and space, cycles of macro-history and micro-history, the macropolitical and micropolitical. In such terms, a quantum flow fathoms new circuits and circulation but without a prescribed form. The form derives from the specific application within a particular context, a defined theatre of operation. The potential challenge is to visualise such theatres in living social contexts. Giving material form to the idea of cultural quanta leads to the production of new dimensions of social circulation, with use-value and exchange value, which operate in spaces parallel to that of normative consumer space. The appliance of 'per capita quanta' implies its own theatres of cultural operation through multiple means, collective and individual, virtual and material, that initiate circulation threads in living contexts.

Bicycle Tree, designed for left-over urban spaces http://xyzlondon.com (Siraj Izhar, 2003)
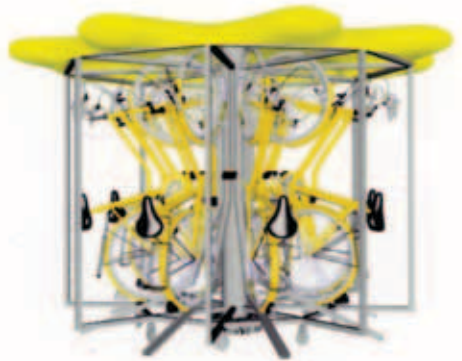
To suggest possibilities: my proposal for the *Living Memorial to Ken Saro Wiwa* in 2005 began with corresponding the circulation of self-generated bicycle-powered energy with a visual output using LEDs (light-emitting diodes) and a communication network (using SMS). The three working together would be the start of a self-organising cycle for a living memorial that would evolve with time. The memorial would work as a 'scenarios engine' in public space, in the service not of corporate strategists but of civil processes. The 'scenarios engine' as a communications network would progressively be appropriated by the public. As the proposal developed, the LED modules scaled up into 6 m spherical structures of carbon C_{60} molecules, to float over the skyline on carbon fibre cables (through discussions with the structural engineer Mark Whitby).

Bicycle Tree model with yellow (Circle Line) bicycles (Design release by Siraj Izhar with Masa Miyamoto, October 2003)

Based on a rate of energy transfer of only one kilowatt, the memorial proposed a self-reproducing energy and communication loop. The circulation of 'quanta' in this loop and its scale of economies depended on the potential space created by public appropriation of the loop; that is, the loop could theoretically up-scale, down-scale or multiply in correspondence with its use in the networked nature of globalised public space and the new dynamics of dispersal and centralisation[17].

Another process using the circulation of mass rather than information and light was initiated in 2003 and involved twenty 7 m³ waste containers (or skips, as they are called in England). The skips collected waste around North-East London, mainly in the borough of Newham, the most multicultural corner of London.

[17] Scheduled for construction in London at various sites in 2008 in association with the Remember Saro-Wiwa coalition www.remembersarowiwa.com www.stalk.net/ LivingMemorial

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un skip project
200 Marlborough Road,
Romford, Essex
31 October 2004

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s_i skips
Waste collection and
recycling, London.
(Siraj Izhar, 2004–07)

[18] Gregory Bateson *Steps to an Ecology of Mind* (Chicago: University of Chicago Press, 1972)

The process outlined a map, with both physical and cultural reach, whose territory was bound by economies of scale on two fronts: by the logistics of the tonnage mass of waste – dead weight – moving around a territory, and the mobility of the labour involved in the recycling of this mass – an informal sector. Whilst the environment today is increasingly valorised in the marketing of a green economy, the labour it depends on is predictably de-valorised. In an ongoing project dealing with metaphoric cultural debris, several parallel forms of social and material quanta intersect in circulation routines that silently produce the new formations of London's civil society.

In both of these instances, a circulation process as a praxis is constructed over time, and by its everyday working continuity, penetrates and propels itself to create its working landscape. Through the practical imperatives of its continuity, the circulation inter-relates segregated strands in the landscape, strands that Guattari referred to as the segregated ecologies of environmental, mental and social worlds. In *Steps to an Ecology of Mind*, Gregory Bateson describes the mental state he called the double bind as a state of conflicting demands that incapacitate the subject, disabling a possibility of resolution through action. The double bind arises through a failure to intuitively correspond different strands of reality and communication – distinguished by Bateson in terms of 'language and meta-language' to differentiate between text, speech, gesture, affectation and the multiple ways in which exchanges of meaning take place. Through its failure to correspond and correlate, the double bind sustains a sense of understanding and perception riven with gaps, a containing structure of reality trapped within the production of communication[18].

In an analogous way, the double bind describes the social function of the injunction 'There is No Alternative', TINA. Both disable the connective link between perception and commensurate action. Both create a 'stop', an unbridgeable space between seeing and acting. It is this space that a praxis as process entangles with as a means of contesting the status quo in the here and now through its distinct characteristics of sustainability, continuity and autonomy. As stated before, this is a messy, complicitous undertaking embedded in the real-politics of situated practice, and often distant from the managed spaces sanctioned for art.

SQUARING THE CIRCLE, CIRCLING THE SQUARE

Bill McAlister, Manu Luksch,
Mukul Patel
2007

Misfits, miscreants, square pegs in round holes... or round pegs
in square holes? Bill, Manu, and Mukul cast distorting eyes over
London, presenting twisted geometries on the Lomowall in
Trafalgar Square and running workshops for visiting lomographers.
Mukul's *A man, a plan, a canal – London!* walk took congress
participants 7 km along Regent's Canal towpath from the Angel
to Docklands, past houseboats and lofts, under willow trees and
over locks, dodging commuters on bikes and cops in choppers,
where the water reflects Victorian warehouses, Hitchcock's
studios, and postmodern skyscrapers. Manu's *Big Brother City
(1. smile... 2. shoot back!)* began with a guide to surveillance in
London and ended in a cam-spotting urban tour, for which she
added an 11th rule to the 10 'golden rules' of lomography –
every image must contain a CCTV camera in the frame.

Lomographic panels
(using multi-lens, fisheye,
swing-lens panoramic and
medium format cameras)
and workshops for the
Lomography World Congress,
September 2007, London
www.lomography.com

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*Indigo indicates the 12
panels of the Lomowall made
by Bill, Manu and Mukul*

Naseem Khan
2007

ARNOLD CIRCUS GHOSTS

The Friends of Arnold Circus came about as a spontaneous reaction of a small core of local people distressed by the run-down and disreputable state of a beautiful and historic site. A rare bit of green open space in a deprived part of Shoreditch, it was shunned by most people in the vicinity. The organisation rapidly acquired 500 members and charitable status. www.friendsofarnoldcircus. wordpress.com

The Friends' activities have brought Arnold Circus back into the life and awareness of local people. An annual Carrom championship, the Picnic where dishes are shared and cyclists challenged to complete 100 revolutions of the Circus, and music (from brass bands to Bengali vocals) – not to mention the fabulous Circus on the Circus in spring 2007 – now bring in hundreds. The Friend's outreach program involves schoolchildren who come to garden; women who are embroidering a wall-hanging that embodies their responses to the natural life of the Circus; and the elderly, whose memories are being recorded.

Who can ever claim to fully own anything? Bits of land and chunks of masonry may be given the official accolade of 'heritage'. But really, 'heritage' is not a static and finite thing. It needs to be re-owned, re-invented, re-modelled, re-defined and re-adopted, over and over again.

Arnold Circus in Shoreditch – with its Grade II listed bandstand – may look solid. It stands there proudly at the epicentre of seven incoming roads, giving seven different views of it. But really there are innumerable ways of looking at it.

When the brand-new London County Council took the decision to demolish the notorious slums of the East End in the 1880s, they had the vision not to simply throw the debris out. Instead they had it fashioned into a small hill with gardens on two tiers, a capacious plateau on top and a delicate little bandstand right plumb in its middle.

It was a rare place, right then – a place for socialising, sitting in deckchairs in ones best clothes, marvelling at the ferocious moustaches of the uniformed band leader and listening to regular oompah sounds of the plummy and comforting brass band.

'What lies underneath Arnold Circus?' children of the nearby Virginia Primary School were asked in the course of a recent writing exercise. 'Dead bodies,' they said.

It was unrespectable and they weren't allowed up onto it, said a couple of young Bengali women who had grown up on the Boundary Estate that surrounds Arnold Circus. Gangs were held to inhabit it. (Or were they simply groups of youths bored out of their minds who'd taken over the bandstand as their private domain?)

Make your way around the circular walkway and you can see other signs of fleeting ownership. Tendrils of pumpkins secretly planted in the night by Bengali guerrilla grannies twine up the iron arches at the foot of the steps. Another invisible hand has buried a pet rat in one of the flower beds and occasionally you can find a joss stick burning over the grave. In the bushes, mobiles made by children in one of the events run by the Friends of Arnold Circus twirl in the wind.

Look again.
There's detritus left by clubbers after a heavy night out. Congealing chicken tikka, pallid chips scattered like an obscure cast of the I Ching.

Vomit, and — one morning — a large human turd planted fair and square in the centre of the bandstand.

Dogs, little and large.

Dog walkers (little and large).
Lone lunch takers.

There is a tenuous feel to Arnold Circus. It feels like a ship of history that is only lightly tethered to the ground and that shudders slightly as the unsightly 78 bus rumbles its crass and needless way around the Circus. It almost seems to float ghostlike at the end of its seven feeder roads, with its six tall plane trees and its sleeping-beauty bushes. And whether or not you give any credence to the powers of ley lines, discovering that Arnold Circus itself sits firmly at the end of one ley line has a peculiar kind of rightness about it.

Lomographs of Arnold Circus
by Bill McAlister, 2007

As translated from a
long-perished cant by
the **Last Mango in Paris**

Photos by **Chris Helgren**
and **Manu Luksch**

EXTRACT FROM THE JOURNAL OF NEWBIUS JOACHIM VINCENT PRAKASH RIPPERTON, 3RD EARL OF UTTAR ATAXIA

On approaching the coast of that green and pleasant land, we were unexpectedly beset by pirates. Despite a queenly struggle, I was manhandled by two gargantuan brutes with forearms the size of my mother's infamous pumpernickel loaves. The experience was not altogether unpleasant. They hauled me below deck, where I was shocked to see an arboretum – on a ship, no less! What was this strange world I had been sucked into?
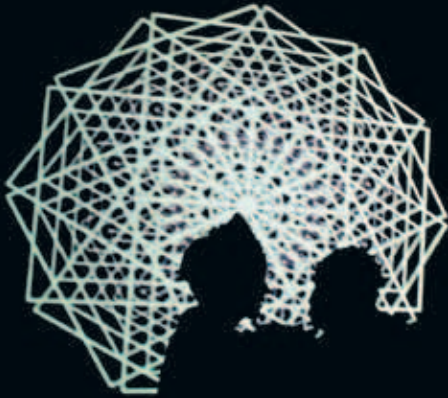
All manner of strange and exotic shrubs bloomed around me – seas of crotons, aloes, sassafras, and an unimaginable variety of purple-flowered cacti. The floor veritably writhed with unusual creatures that I had not encountered before: ancient wrinkly beasts with shells on their backs, into which they retreated when sleeping. Before me towered a wiry skeleton of a man with a shock of white hair, astride a machine that resembled a horse. He asked me to remove my outer garments (it was my pleasure to oblige) and passed me a piece of card no bigger than the tiniest pinch of snuff.

The card bore a picture of an Oriental goddess, wearing a garland of skulls around her blackened neck. The skeleton man asked me to place the card under my tongue, which I did, albeit reluctantly. It was obvious that I was being prepared for some primitive ritual. A hatch in the floor swung open, and the air was filled with dense smoke and a heady aroma not unlike that of frankincense. Out of the smoke emerged a vision.

Half man, half cat, he wore a kimono fashioned by legendary woodcutter of yore, Missey Iyake. His right eye was covered with an indigo eyepatch. On his left paw rested a parrot whose jaws had been bound together with wire that cruelly cut into its beak, and over his shoulder was a bag which vacillated from side to side. Though the creature's lips did not move, I heard him say, 'It is full of amoeba, my friend. Amoeba.' He smiled at me – and this smile penetrated to my core. It was in that moment that I knew we shared a commonality rooted in humanity's hidden desires.

The shock-haired general straddling the mechanical horse cleared the phlegm from his throat and growled, 'Endtroducing his sexcellency, the Grand Turq Loukoum!'

The sartorially splendid beast smiled once more, lit a cheroot and took me by the hand down rickety wooden stairs into a chamber filled with thousands of black, shiny discs. I could have sworn I saw a huge dragon scuttle into the darkest recesses of the chamber's ceiling, but on further scrutiny I could detect nothing. I felt my captor's eyes burn a hole through the back of my neck, and again I heard his voice in my head: 'Everything is true. Nothing is sacred.'

I turned to the Grand Turq. He smiled, and mouthed, 'Nothing is true. Everything is sacred.'

I gasped incredulously. Had this kingly creature also come across Hassan i Sabbah's garden of earthly delights, upon whose gates was inscribed this unholy aphorism?

The Turq Loukoum prepared by his own paw a dish of piquant peas, and after we dined he poured a thick black medicine into a thimble. I should have known better than to drink it, but I was disarmed (nay, dismembered) by his feline charm. Instantly I fell into an inebriated stupor, accompanied by dreams of a giant black incubus, hair matted into rope-like strands, who sat on my face and tutted disapprovingly...

I woke on the roof of a palace in a strange city. Black birds circled and squawked incessantly, as if warning me to the strange scenarios that were to unfold before my eyes. Ebony males in dresses stood on their hands balancing trays bearing champagnes and canapés, which were devoured by a Bohemian crowd of salubrious characters who danced the fandango and spoke in tongues. In each corner sat groups of coolies, punching away at what I assumed were counting machines.

Later I learned that these click-clacking devices were called mouseapples; which can be no coincidence, for on a throne in the centre of this maelstrom of sin sat a flame-haired woman, the spitting image of the fabled temptress Lilith.

A chocolate-skinned pagan in drag wailed, 'Hail Una'amlux! Queen of the Crucible!'

The impressive matriarch conducted the throngs of gyrating heathens. Slowly, as my eyes became accustomed to the blackened night, I began to establish the identities of other orchestrators of this veritable orgy of gluttony and perdition. A tiny damn-Asian devil span like a whirling dervish and uttered spurious, strangely exhilarating incantations. His bald pate was graced by a feathered mask. A clandestinely camp custodian carved copious cuts of casu marzu, ably assisted by a small mountain of a woman I recognised from pornographic etchings of the Victorian era; it was none other than Koko De Mari, infamous for her exploits with raw fish!

Turq Loukoum was obviously complicit in engineering the complaisance of this seething mass of godless hoofers, hypnotising them with a horrific myriorama of a paranoid king

bedevilled by his own shadow. Like a puppeteer, the Turq stood with his paws up the backsides of two small brown boys who governed a tower of mechanical devices before them. A strangely sweet sound emerged from vibrating surfaces encapsulated in a series of large wooden boxes. Amidst the waves of tintinnabulation, I deciphered a reversed message repeated ad infinitum: '706090 0499 code'. I scribbled down the digits furiously (in the hope that they might beckon to me a time-travelling Hackney Carriage to bear me to my beloved) but on doing so, felt a paw on my shoulder, and *that voice*, redolent of silk, cinnamon and scientific malpractice, bouncing across the rooftops like a Shakespearean sonnet on heat:
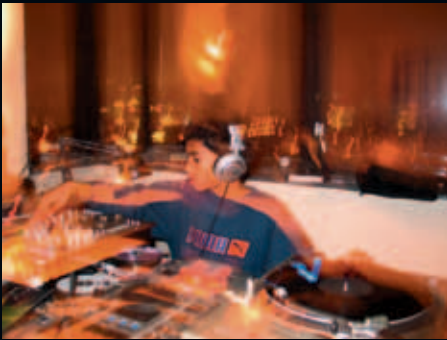
'Ladies and gentlemen, charge your glasses and polish your asses; we are never going home...'

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5. Closing the loop

5voltcore's *Shockbot Corejulio* is a computer-robot-screen assemblage that shorts its own circuits, generating random images until it destroys itself — a relatively closed system running a relatively open process. Its one conceit is that it presents itself as spectacle.

Tighten the noose: populate the deserts and oceans with thousands of these automatons, drawing their power from sun and wind and waves, rasterising in the wild. Artifical life's but a walking shadow, a tale told by an idiot, signifying nothing.

Mukul Patel
2007

31-12-02
01-01-03

mukul vs oriental soundz

samaj soundz vs mukul

LOOK FAR EAST

THE HOUSE
...rised open / athina vahla
www.houseofkurtz.org
installation mukul (ambientty.net)
...ve promenade performance
september 19 2002

STUT-UTTERER
mukul 1997

if on a winter's night a traveler
mukul
berkeley
nov 2000

oleg kulik
armadillo
far show

JAMKA
at ambientspace
live recording 01/2005

mukul mixed it
1997
indiska /
r.f.interference

frühstück mit wolfgang
mukul mixed it at ambientspace nov 2004
part 1

frühstück mit wolfgang
mukul mixed it at ambientspace nov 2004
part 2

The SPACE Age Sirens
led by Laka D.
in collaboration with
Manu Luksch and Mukul Patel

mukul@ambientty.net

23   23

mukul 2004   music for dance

DVD

THE STOLEN KISS
...OF THE KISS IS REMOVED
...ul mixed it

bellatonna
mukul

allah who?
turquish blue!
mukul DJ set at the freedom café,
soho, london 1997
for rana salam

...
LET YOUR VOICE BE LOW
SO THAT ...COMBO
ARE NOT DISTURBED

FROM ambient SPACE

Marine Drive
mukul

the jaguar
and the hunter

mukul 1997

mukul 1999

BRAZILNUT
MONKEY BANANA

bollywood
nightmares

mukul
2002

RADIO FRO

MUKUL

DJ SET

27•10•2002

ON AIR

mukul 1999

BRAZILNUT
MONKEY BANANA

Love is Life

THE BURNING TRAIN

songs&sounds from
Luang Namtha Province, Lao PDR
www.ambientTV.NET/okbo

AQ HAQ ARD MA

VIRTUAL
BORDERS
soundtrack 60

ambientTV.NET
karaoke burning

MOSCOW · PARIS · LONDON

1: mukul vs saul

sat 24 may

2: mukul vs equal-i

sat 24 may

3: equal-i vs mukul

sat 24 may

Get Fresh in 1997

1997 was a good year for underground dancefloors in London. Tina Moore's 'Never Gonna Let You Go'[1] sweetened even the greasiest breakfast at Tony's cafe on Broadway Market. The Blue Note club in Hoxton Square hosted groundbreaking nights including *Metalheadz* (which took drum and bass overground), Ninja Tune's *Stealth*, and the genre-breaking *Anokha* (literally, 'unique'). The sound of the city heralded an eclectic future, optimistically global. Developments in neighbouring Shoreditch were nearing the tipping point of hip. Artists had moved into Hoxton's abandoned warehouses in the 1980s; by the early 1990s, the area had become identified with the YBAs (Young British Artists). And now word had spread. Once lacking even a decent convenience store, the square was packed with bars, galleries, design studios, and web professionals, and the ShoHo (Shoreditch–Hoxton) effect was being felt in Brick Lane and the City borders[2].

New Labour had been voted into power with a huge majority, ending 18 years of Tory rule. The previous year, *Newsweek* magazine had pronounced London 'the coolest city on Earth', and Labour's Culture Secretary Chris Smith was quick to capitalise on the new optimism by branding Britain 'Cool Britannia'[3]. She no longer ruled the waves, and had willingly destroyed her industrial backbone – but she was sexy, talented, and confident. Hopes ran particularly high in East London. Trendies in sharp finned haircuts sprang down Curtain Road, speed-talking into their mobile phones, DJ bags slung around their shoulders, baggy trousers hanging low over unreleased trainers. People who would have been – or actually were – squatting in the 1980s were now starting up dot-coms. The Internet industry was hyped: young designers knocked together multimedia animations for corporate clients buying into 'web guerrilladom', and blew the surplus on art projects and lengthy research trips to exotic locations (holidays). *The Guardian* trumpeted the advent of the 'flexicutives' – young entrepreneurs with a bohemian touch who embodied the new value system that merged urban cool with making lots of money[4]. One friend later said, 'it was all crap but I liked the leather sofas.'

[1] Tina Moore 'Never Gonna Let You Go', written by Tina Moore and Tommie Ford. 12" vinyl single (London: Delirious)

[2] Simon Pope summarised the mood in his piece 'After the revolution, the after party' in *The Futile Style of London*, available at: http://bak.spc.org/iod/cuba.html

[3] 'Cool Britannia' was the name of a dessert made with vanilla ice cream, strawberry, and choloate-covered shortbread confection launched by the Ben & Jerry's ice cream company in 1996, and since discontinued. The dessert was developed by an American lawyer living in London for a recipe competition. *Editor's note; hereafter: [Ed]*

[4] 'Flexible friends', *The Guardian*, 4 February 1999. www.guardian.co.uk/flex-exec/Story/0,,208727,00.html

CREATIVELY TASKED

It was also in 1997 that the newly created Department of Culture, Media and Sport (DCMS) launched the Creative Industries Task Force, which published its first Mapping Document the next year[5]. This document summarized the contributions of what it defined as the cultural sector to the nation's GDP. A very broad range of activities fell under the definition, including advertising, leisure software (games), music, fashion, and arts and antiques (a single category). There was no doubt about the strength of some of these industries; even so, the Document inflated the overall economic impact by including many peripheral activities, such as catering in theatres.

The 20 years preceding the publication of the Mapping Document had witnessed fundamental changes in arts funding policies. Subtle shifts in language masked profound political transitions. The term 'culture industry' had been introduced by Theodor Adorno in the 1940s to point out the fundamental incommensurability between the arts and capitalism, which made the art work subservient to economic rationality. European cultural policy in the 1970s reflected this critique to some extent; the market-driven cultural products of the US were seen to pose a cultural threat to both popular/folk forms and 'high' art. But the threat was also perceived to be an economic one. Both Left and Right formulated protectionist policies, with the Right, under the sway of romanticism and idealism, tending to support 'high' art such as opera. Meanwhile, the younger generations turned their backs on 'high' culture, instead expressing their energy through trends such as pop and punk, both suffused with a DIY (do-it-yourself) approach. These movements became not only fashionable, but also academically validated through the burgeoning field of Cultural Studies and the advent of the postmodern stance, which collapsed the traditional dichotomy between 'high' and 'low'.

In the early 1980s, the left-leaning Greater London Council (GLC), led by 'Red' Ken Livingstone, developed the idea of the 'cultural industries'. GLC policymakers came to regard popular youth culture as containing legitimate, grassroots movements that could articulate a radical politics of ethnic and sexual diversity. The GLC highlighted sectors such as rock music that were significant creators of cultural and economic wealth, and outside the scope of public funding, but nonetheless vulnerable to market vagaries. The proposition was to intervene in the market to support such industries, thereby promoting a social democratic idea of cultural production and

[5] Available from www.culture.gov.uk/ Reference_library/ The DCMS is responsible for the government policies on 'alcohol and entertainment', tourism, and gambling, among others. Before 1997, the DCMS was known as the Department of National Heritage.

[6] 'I think we've been through a period where too many people have been given to understand that if they have a problem, it's the government's job to cope with it. "I have a problem, I'll get a grant." "I'm homeless, the government must house me." They're casting their problem on society. And, you know, there is no such thing as society. There are individual men and women, and there are families.' Margaret Thatcher, *Women's Own* magazine, 31 Oct 1987 *[Ed]*

[7] In the UK, the summers of 1988 and 1989 witnessed the explosion of the acid house/free party scene, fuelled by various flavours of electronic music, LSD and ecstasy; there are parallels with the Summer of Love (1967, San Francisco) *[Ed]*

[8] A network of academic and government networks (internetwork) grew from the 1960s (initially in the US, later linking to Europe in the 1970s) and developed into what has become known as the Internet in the 1980s. Until the late 1980s, it was a strictly commerce-free zone.

[9] Daniel Bell, quoted by Richard Barbrook in *The New Class* (London: Creative Workers in a World City/ Openmute, 2006)

distribution that would also generate employment, rather than offering the traditional subsidies to the establishment 'high culture'. But the central government under Margaret Thatcher had a profound distaste for disbursing grants[6], and saw little reason to fund artists who were loudly oppositional. By 1986, the GLC and the six other Labour-controlled Metropolitan County Councils had become too much of an annoyance to the centre, and they were simply abolished.

For the next 14 years, London survived despite a lack of a central planning authority. By the turn of the 1990s, it had become evident that some groups of 'cultural producers', including pop musicians, fashion designers, and occasionally even filmmakers, contributed very significantly to the economy. Fortuitously, these groups had little (socialist) revolutionary fervour left after nursing hangovers from the Second Summer of Love (1988–89)[7]. What they needed was a way to shift more product. With the release of the NCSA Mosaic web browser in 1993, the Internet awoke from its academic slumber and became populated[8]. The conjunction of distributed information services and the exploding pop mainstream laid the foundations for an entirely new cultural-economic model.

In the 1960s, prophets of the new society had claimed that 'the rapid convergence of media, telecommunications and computing was sweeping away the economic, political and cultural certainties of the industrial age'[9]. What made the difference in the 1990s was the paradigm shift to digital networked space, the most potent expression of the promised post-industrial society where the privileged trade only information. Marshall McLuhan provided a theoretical framework for the understanding of social change at the close of the 20th century. The advent of information society would inevitably lead to the hegemony of creators of information: the immaterial labourers, the 'digerati', the virtual class. In the 1990s, ruling bureaucrats, politicians and think tanks eagerly bought into the concept of a new class. And when the DCMS introduced the term 'creative industries'[10], it was the 'digerati', the new class of cultural entrepreneurs on the Net, that was to be the vanguard for its policy[11]. In East London in 1997, a particular instantiation of the new class could be studied in a small biotope. The web impresarios, club-night organisers and art people rubbing shoulders in the 'creative cluster' around Shoreditch and Hoxton transformed it into ShoHo, hipper and younger than the old centre of the media industry, Soho.

Whilst bearing a resemblance to the old GLC idea of the 'cultural industries', the new 'creative industries' concept dispensed with the hope of social redemption through cultural practice; instead, it revolved around the exploitation of intellectual property (IP) for profit. As Britain was one of the few net export earners of licence fees related to IP, creativity and cultural entrepreneurship were seen as significant contributors to future economic development of the nation. In subsequent reports and analysis the growth rate of the creative industries was usually given as double that of the 'normal' economy[12].

Peculiar to many of the products of the creative industries, as defined by the DCMS, is that they are positional goods – they serve to distinguish the cognoscenti. Moreover, they tend to be goods for which tastes are suggested through marketing and finally acquired through consumption. Thus the creative industries exemplify a sophisticated late capitalism. But for many artists, the calculus was not performed in monetary terms. Indisputably, the UK was buzzing – despite the policymakers proclamation of 'Cool Britannia' – and it was a relatively innocent enthusiasm that prompted multi-instrumentalist Talvin Singh to describe the *Anokha* club nights as 'tastemaker sessions'. (Entry was a modest £3).

'Cool Britannia' as an exercise in nation-branding was a short-lived failure, whose demise was hastened by the growing crisis in UK agriculture. The Right ridiculed the idea that the label 'cool' might be sufficient in attracting major foreign investment. Nevertheless, an eager Tony Blair, playing on his relative youth, continued to invite a stream of (not quite cool) rock stars to official receptions. Soon, however, most of the artists realised they were in danger of becoming quasi-official ambassadors for a government that was quickly losing its shine. Cold-nosed Britannia notwithstanding, the strategy to promote and exploit the creative industries remained in place.

THE FALL OF SHOHO
The hype around the new creative class had a massive impact on the property market in inner cities, particularly in East London. The industrial decline of the 1970s and early 1980s had left many urban areas derelict. From the 1980s to the mid-1990s, artists had taken over some quite spectacular factories, warehouses and canal fronts. The media declared the locale hip, and investment poured in. In the midst of the 1990s new economy boom, as Shoreditch became web-designer central, property developers followed hot on the heels[13].

[10] 'Those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.' (DCMS, 1998)

[11] Ideas about a techno-cultural elite have a deep historical context, as Richard Barbrook has pointed out (op. cit.). The popularisation of the idea of the 'knowledge economy' dates back to at least the early 1960s, when Austrian-American economist Fritz Machlup published *The Production and Distribution of Knowledge in the United States*.

[12] *Creative Industries Economic Estimates, Statistical Bulletin, October 2005 – Revised Version* (DCMS, 2005)

[13] 'By hanging out in these urban villages, the Cybertariat can help each other to find new jobs, learn new skills and discover new ideas. Alongside the traditional duo of the market and the factory, the network has become the third – and most modern – method for organising collective labour.' (Barbrook op. cit., p. 38)

[14] John Barker, 'Reader Flatteries – Ian Sinclair and the Colonisation of East London' [online]. *Mute* magazine, 7 July 2006. Available from: www.metamute.org/?q=en/ reader–flattery

[15] 'One day we looked out of the window and saw lots of people with mullets. The next day the landlord came round and doubled the rent and we had to move [...] Before, the area was driven by people's work. Now it's driven by people going out in the evening.' Fashion designer Alexander McQueen interviewed in *The Guardian*, 21 November 2003: 'Where have all the cool people gone?' http://arts.guardian. co.uk/features/ story/0,,1090073,00.html *[Ed]*

[16] Despite being not quite so Red, Ken Livingstone had another battle with a Prime Minister – this time, from the Labour Party – as Blair attempted to block his standing for the post of Mayor. *[Ed]*

[17] Barbrook op. cit., p. 38 quoting GLA *Economics, Creativity: London's Core Business*, p. 33 (London: Greater London Authority, 2002)

Then, the people who had turned Notting Hill (in West London) into a millionaires' ghetto began to move east[14]. The area underwent continuous, rapid, and dramatic change, reaching its logical conclusion within a few years – the boom killed off its own reasons for being[15]. The Blue Note was forced to shut down because of complaints from new neighbours, while around the corner, independent bars and restaurants that were only two or three years old were taken over by better-heeled proprietors. By summer 2007, once-YBA haunt The Bricklayers Arms had shut its doors, and exclusive private members' club Soho House had opened its East End branch (annual fee: £700). A commercial consumer culture took over, and almost everything that had made the area interesting in the first place disappeared.

The fall of ShoHo was substantially a result of astonishing price rises caused by property speculation, and a foreseeable effect of government policy. Just as the GLC's 'cultural industries' policy was revisited in a transformed manner by the DCMS, so government for the city itself returned in 2000 in the form of the Greater London Authority (GLA), led once again by Ken Livingstone[16]. The new Mayor's agency for strategic planning was called the London Development Agency (LDA). What had happened in Shoreditch in an organic manner became the blueprint for future inner city regeneration under the LDA's Creative London scheme. The LDA claimed to cherish 'the city's New Independents and Free Agents'[17], the digital artisans concentrated in Shoreditch. The hope was that an open, cosmopolitan environment would foster a culture of creative risk taking and lucrative innovation, as it had in other urban villages such as San Francisco's SoMA (South of Market Street). By the late 1990s, it had become standard policy to deploy new cultural spaces as vanguards for regeneration. But without adequate controls on developers, it was a policy that could not benefit the existing inhabitants. By the time the White Cube 2 gallery opened in Hoxton Square in 2000, many of the artists who had put the square on the map had moved on. Behind the Square, to this date (2008), social housing blocks that accommodate hundreds remain conspicuously unimproved.

In the 1990s, the phantasm of a particularly profitable class of 'creatives' started to become every European government's wet dream. A decade later, the 'creative industries' became a focus for the British Council's overseas 'cultural diplomacy'. Beguiled by the promises of the Internet, and mesmerised by creativity unleashed from the (digitally) hip, administrators in

the arts sector have begun to rewrite funding policies. The erosion of historically important values has taken on various forms, from the instrumentalisation and commodification of the arts at all levels, to the implementation of media industry restrictions on copying. But the full picture is much more complex than this abbreviated history suggests. The Net has not only brought back entrepreneurship into business, but also encouraged strong movements that do not obey the commercial maxims implied by the term 'creative industries'. Far from being bent on collectively safeguarding the future economic success of the nation state, artists and activists are proposing alternative value systems. Whether through socially engaged practice with art and technology, or through technical solutions for an always-on, networked society, models of sharing and collaboration in the digital commons are 'selling' themselves without ad companies creating desire. The practice of East London-based ambientTV.NET exemplifies a possible approach to the construction of an aesthetic and ethical community in the present.

The Emergence of ambientTV.NET

Early in 1997, Manu Luksch arrived in London. The Vienna-born artist settled in Hackney Road, a 10-minute walk from Hoxton Square and equidistant to Broadway Market, where she would later establish the ambient.space studio. Almost immediately, she encountered two individuals who would greatly influence the direction of her work. Sophie Poklewski Koziell, with whom Luksch shared an apartment, was writing a book on DIY and direct action movements in the UK[18], while in South London, James Stevens was applying the DIY ethic to digital networking. While she had been studying at the Academy of Fine Arts in Vienna, Luksch had made a 16 mm short (*So Oder Anders*, 1994) about the regeneration of a market square[19]. She was already working outside the frame, though, having assisted the production of Peter Greenaway's exhibition *100 Objects to Represent the World*, and compiling a CD-ROM (*to be continued*) of students' work. In 1995, she was invited to manage the online presence of Hamburg Expo 2000 by the Media Lab Munich, of which she subsequently became Artistic Director. A year later, she visited the Next 5 Minutes (N5M) 2 festival in Amsterdam[20]. N5M 2 emphasised the tactical qualities of media – its social and political potential, media as a tool, and many-to-many broadcasting. As such, it bore a stark and refreshing contrast to the long-established Ars Electronica, which Luksch described as a temple for the

[18] Elaine Brass and Sophoe Poklewski Koziell *Gathering Force: DIY Culture – Radical Action for Those Tired of Waiting* (London: The Big Issue Writers, 1997)

[19] During the filming, fires broke out twice in the square. It later transpired that insurance company Wiener Städtische had made a deal with the district authorities to redevelop the square. No charges of arson were brought. *[Ed]*

[20] The tactical media festival Next 5 Minutes has been held every few years in Amsterdam since 1993, when the theme was the 'camcorder revolution'. Discussing the N5M 2 festival in 1996, Luksch had already proclaimed the high-tech media installation format moribund, 'killed by flirtations such as art-activism, art-science, and art-social sculpture'. www.next5minutes.org

worship of high-tech 'high art'. N5M 2 could be seen as part of a historically opposed tendency to such fantasising by the elite — a tendency that admitted the possibility of radical change from below. For Luksch, N5M 2 was a revelation — it instigated her thinking about the convergence of older media, such as experimental film and documentary, with the Internet. Later, in London, she would come to a more robust formulation of her ideas as she recognised the transformative possibilities of hybrid media.

DIRECT ACTION IN THE UK

In the Hackney apartment shared with Poklewski Koziell, Luksch very quickly learned of the breadth and depth of the direct action movement in the UK[21]. Driven by a grassroots environmentalism, diverse protest campaigns fought for land rights and civil liberties and against roadbuilding, airport expansion, genetically modified crops, and the export of live animals for slaughter. On one occasion, the two women visited the iconic Swampy who was part of an occupation of Manchester airport. Dissatisfied with the failure of traditional politics to respond to their concerns, infuriated by encroachments upon civil liberties designed to quell protests, and despairing of the mainstream media's usual fare, ordinary people were acting, and ensuring that their actions were reported. Protesters built villages of treehouses, dug elaborate tunnels, chained themselves to the sites, and coordinated their strategies and disseminated tactics through vibrant publications such as *SchNEWS* and *Squall*. Impressed by the scale, ingenuity and media-awareness of these movements for a more habitable future, Luksch would next encounter an exemplary open space where visions of the digital future were being nurtured.

BACKSPACE TO THE FUTURE

In 1996, James Stevens was part of an early, small web design and hosting company called Obsolete, located in Winchester Wharf on Clink Street near London Bridge. (The building was also home to record label Ninja Tune and interactive audio collective Audiorom, among others). Stevens' interest in commercial web work was limited, but he took advantage of the available ground floor space below Obsolete, and of the high speed bandwidth, to set up Backspace. Occasionally described as an Internet café, Backspace didn't sell coffee, though there was a donation box in the kitchen. Online access was through a monthly subscription model, and minimal rules and costs gave the space a spirit of independence and openness. Uniquely, Backspace brought together a very diverse group

[21] The direct action movement in the UK has a long history. One immediate precursor to the 90s environmental protests was the Greenham Common Women's Camp that began in 1981, against the siting of US nuclear cruise missiles at RAF Greenham Common. But the roots stretch back to the first anti-enclosure movements. Enclosure, the privatisation of once common land, gathered pace in the 15th and 16th centuries in Britain. It was denounced by the Church and initially even by government. The anti-enclosure movement was conservative and conservationist, rather than politically radical. *[Ed]*

[22] Amidst the turbulence of a Latvia newly-independent of Soviet rule, Ilze Black began to organise events in Riga together with Kaspars Vanags under the label Open. A young generation of artists who emerged from the Soviet past

of people to inquire into the potential of the Net for art and social innovation. It was there that Luksch first encountered many fellow travellers and future collaborators, including Gio d'Angelo, Rachel Baker, Ilze Black[22], Alexei Blinov, Heath Bunting, Pete Gomes, Lisa Haskel, Siraj Izhar, and Kass Schmitt. Everyone learned through doing, and through swapping skills. In a climate of open exchange, programmers, artists, and activists crossed disciplines and forged alliances that would power significant initiatives for at least the next decade.

Backspace was hangout, lab, classroom, production studio, conference venue, and anything else it could be to its users. It would provide web services to interested and interesting parties, for example to artist Franko B and the Torture Garden club. The high speed connection, a rarity in those days, enabled experimentation with live audiovisual content on the Net. Backspace Internet radio participated in the net.audio community of Xchange (founded by Rasa Smite, Raitis Smits and Janis Garancs of Riga-based E-LAB). In 1998, Backspace was the main venue for Art Servers Unlimited (ASU), a conference organised by Luksch and myself. ASU has had lasting significance because it was the first conference to bring together people from all over Europe who were running servers dedicated to the artistic, social, cultural, and political use of the Internet.

BEFORE INDYMEDIA, BEFORE SEATTLE
Backspace also played a significant role in the June 18 Carnival against Capitalism in 1999 (J18). An international day of protest timed to coincide with the 25th G8 Summit in Köln, J18 was the first large international 'anti-globalisation' protest (more accurately described as a protest against neoliberalism)[23]. It was also the first large protest to harness the power of streaming media, which it did with such effectiveness that a global independent media network, Indymedia, sprang up in its wake[24].

In the months leading up to J18, an Internet mailing list had been set up and used to plan media action. The protest started in Australia, and new cities joined in every one or two hours. In London, camcorder-wielding protestors passed tapes to couriers who biked them to Backspace. At Clink Street, Coldcut mixed sound to the footage as the (not-quite-live) webcast proceeded.

While protesters challenged the neoliberals, property developers swarmed around London, taking interest in

leaped straight ahead into artistic practices that would be regarded as avant-garde further West, too. But how could they know that? As the first wave of enthusiasm faded and a feeling of business as normal was setting in, Black moved to London, where she met and, for a period, worked with Luksch.

[23] 'Anti-globalisation' is a problematic term, since the collection of movements that it is typically applied to are at least partially in favour of globalisation (in the sense of lifting restrictions on movement of people); what they are against is the neoliberal project and the undermining of local markets and the ecosystem by transational corporations. Tellingly, the slogan for J18 was 'Our Resistance is as Transnational as Capital.' [Ed]

[24] The mainstream media did not anticipate the scale of the protest and had no dedicated crews on the ground. The TV news broadcasts had to resort to using footage from the webcasts to illustrate the story. It is now of course commonplace for the mainstream media to use and even solicit 'amateur' media files. [Ed]

[25] See my text 'On Free Wavelengths' in this volume.

[26] An area stretching over the borders of Thailand, Burma, Laos, Vietnam and China; infamous for opium growing and smuggling, but also for some of the worst excesses of American high-tech warfare. *[Ed]*

[27] Sadly, Dr. Alting von Geusau (1925–2002) did not live to see Luksch complete the project. *[Ed]*

[28] In 1997, Luksch had been to Laos with Dr. Alting von Geusau, carrying a script for a film called *Secret Recipes, Secret Wars*. During the Second Indochina War (late 1950s–1975), Laos became the most heavily bombed place on the planet, despite having never been subject to a declaration of war. The Akha in Laos supported neither the communists nor capitalists; nevertheless, the war carried on over their heads. The US used Laos as a wartime proving ground: Agent Orange, napalm and high explosives rained down on the forests. In the film, wartime recollections of elderly Akha were to be intercut with revelations about the culinary culture. Sadly, the project had to be abandoned when the team fell seriously ill. *[Ed]*

Winchester Wharf among other places. Backspace had been under threat for a while, and finally folded in December 1999. James' next idea – DIY network building – mirrored the new desire to put your own place online (versus the past need of finding a place from where to get online). With the launch of Consume, this became a campaigning initiative to bring free (libre), open wireless networking to anyone who wanted it[25].

MARKING DOMAINS, CROSSING BORDERS

For Luksch, the attraction of hybrid media lay in the possibility of bringing the qualities of the Internet out of virtual space, of breaking the frame of the computer monitor. In the late 1990s, the space between old and new media was still uncharted territory. Backspace made possible some of the first tentative forays into this space. In collaboration with Backspace, Luksch streamed video interviews at *Expo Destructo*, Matthew Fuller's 1999 event that brought together activists from direct action movements and net culture. Until streaming became feasible, Luksch had been 'floating between chairs in film festivals and in media art festivals'. But as the space of convergence became populated, so her place within it became more discernible. And with *Virtual Borders*, her first major hybrid media project, she would expose the richness and potential of this space.

FROM CHIANG MAI TO HACKNEY (AND BACK AGAIN)

In the early 1990s, while studying at Chiang Mai and Chulalongkorn (Bangkok) Universities in Thailand, Luksch had come to know the Hani-Akha people, one of several mountain peoples living in the borderlands of the Mekong Quadrangle[26]. The initial idea for an extended documentary about the Akha occurred to her in 1994, when she assisted a media workshop at MPCD–SEAMP, a Chiang Mai-based NGO headed by Dr. Leo Alting von Geusau[27]. A response to forcible dispossessions by logging companies, the workshop trained indigenous peoples to use video cameras for mapping their terrain to support their claims to the land.

In 1999, Dr. Alting von Geusau alerted Luksch to a forthcoming conference on Hani-Akha culture, to be held in China. The Akha share a common oral culture, but their dissimilar statuses in the different nation states they inhabit, and the divergent influences of the majority languages therein, are changing it rapidly, for better and for worse. The conference was intended to be a forum for celebrating common heritage, discussing concerns about changes, and proposing strategies for uniting the Akha across borders.

Luksch returned to the region with a small crew (Dara Khera and Tarik Thami)[28]. The context of the conference, and her experience with streaming at Backspace, suggested a form for the project, and a title: *Virtual Borders*. The team followed an Akha elder from his village near Chiang Mai to the conference in Jinghong. At the conference, they recorded the speakers and interviewed many participants, then streamed audio files back to Thailand. In Chiang Mai, the Mountain Peoples' Radio Station (originally a wartime broadcaster of US propaganda) relayed the streamed conference proceedings and interviews by AM radio to surrounding Akha villages. This broadcast gave the Thai Akha an opportunity to hear a debate involving Akha from other nation states. The team also helped the community build the first Akha language website.

A FILM ALWAYS HAS AN END, WHILE REALITY CONTINUES

The major manifestation of *Virtual Borders* was to have been a database-driven film[29]. The beginning would be a traditional authored documentary, introducing issues and themes while following the protagonist to the conference. At this point, the film would branch into a nonlinear section – hypermedia. Viewers would navigate thematically through footage from conference events, speeches and interviews. There would be numerous clips, totalling several hours, arranged according to themes such as 'religion', 'language', 'song', and 'citizenship'. These cross-linked branches would then converge into a common, authored concluding portion[30]. The final frame of this section would be identical with the homepage of the Akha website, and so the film would continue online. A hyperfilm is an ambitious undertaking, in this case even more so given that there was virtually zero external funding. Basic equipment, travel costs, shooting expenses – all were provided by in-kind support of the producers, or paid for from Luksch's (rather limited) personal funds. Throughout the production, the project was dependent on goodwill and borrowed equipment and expertise.

In 2000, Luksch presented the concept at the Amsterdam Documentary Film Festival that year, speaking at the first-ever panel on documentary and the Internet (Docs Online), and generating a huge amount of interest. However, the project dealt with a minority topic, and so was not attractive to many funders. The translation of hours of material from Akha language posed an additional burden. Determined to complete the project, but unable to commence on the database model without external support, Luksch decided to simplify the film and make a linear edit[31].

[29] The project was intended for close viewing by individuals or small groups. For mass viewing in a cinema, an alternative approach would have to be developed – for example, at any particular screening, the navigation could be preprogrammed, or conducted randomly, or chosen in some way by the audience. But the first two approaches compromise the hypermedia, while the third presents technical challenges and is also perhaps more appropriate for a thriller or action movie. *[Ed]*

[30] The DVD Video specification supports random access to clips arranged in a cross-linked branching structure. *[Ed]*

[31] Even this was no mean undertaking – the film, eventually cut to 90 minutes, features dialogue in five languages (Akha, Thai, Chinese, Burmese, and English), subtitles in English, French, Italian, Japanese, Slovak, and Thai, and voiceovers in Akha and Hindi. The DVD of the film carries all these alternate languages, and the Akha-dubbed version also exists as a VCD (video CD) for ease of distribution in mountain villages. *[Ed]*

Taken as a documentary film alone, the work is extraordinary –
a polyglot anthropological road movie that navigates by jungle
paths and satellite links, it is committed to the Real in a unique
manner. *Virtual Borders* does not attempt to disinterestedly
present a reality, nor does it pose the problem of reality. It
is instead a document of engagement, where the international
film crew train and collaborate with the Akha to enable them
to exploit the new reality of digital networks as producers.
What results is something like an ethno-anthropology, more
self-documentation (by the Akha, by the crew) than other-
observation.

Despite the abandonment of the database film, in 2004 *Virtual
Borders* did finally achieve a deeply reflexive hypermedia
quality when Luksch returned to the Akha village where the
story began and presented the film on a network of TV sets
arranged around the village square. Grasping the larger
project – its hybrid and interdisciplinary quality (involving
establishing communication links, training people in their use
and documenting the process); its breaking of the fourth
wall (not into the theatre, but into cyberspace), and of the
ceiling too; and its existence as a social interstice (in Nicolas
Bourriaud's sense) – is key to understanding the evolution of
ambientTV.NET.

EMERGENCE OF A TOOLBOX
It was in this environment of new social and technical networks,
streaming media, and hyperfilms that ambientTV.NET emerged.
Designed to be a toolbox, the new formation comprised an
Internet domain, a physical space, and a company. A domain
was needed to host *Virtual Borders* and future hybrid
media projects. The name chosen connotes that which
envelops us all (particularly, information systems); using the
obligatory punctuation of the 'dot', it couples television
('remote seeing') to the 'NET', the demiurge that makes
everything possible.

Although the Net had led to a revaluation of physical space,
the complexity of *Virtual Borders* necessitated a permanent
workplace. Documentary distribution company Mondial, which
had been founded by Alan Fountain and Sylvia Stevens as an
online platform for filmmakers and an alternative to network
TV, offered Luksch a giant desk in a warehouse in Shacklewell
Lane, East London. Other occupants included documentary
makers Faction Films and Keith Shiri of Africa at the Pictures.
Thus, ambientTV.NET found a home in the East End.

The third item in the toolbox, the limited company Ambient Information Systems (AIS), enabled the raising of funds and the proper management of risks and contracts with other bodies. In the romantic spirit of the autonomy of art, running a limited company as an artist might seem like a Faustian pact. However, for ambientTV.NET, the company structure of AIS acts as a buffer, allowing the artistic activity to float freely above the material base. Clearly distanced from the overwhelming drive towards commercialisation associated with the 'creative industries', ambientTV.NET's projects are not determined by the legal structure that carries them. While not officially a non-profit venture (as of 2008), profit maximisation is not an operating principle of AIS – rather the opposite may be inferred from ambientTV.NET's allegiance to a philosophical perfectionism.

The ideas shared and bonds forged at Backspace survived the displacement to East London to inform early projects such as *Telejam* and *ambient.wireless*. But the constellation that ambientTV.NET developed into ventured much further into the distant reaches of mediaspace to forge a distinctive, if rather variegated and complex, identity.

Taken for a Ride: The New Economy

ambientTV.NET emerged just as the 'dot-com bubble' that began in the late 1990s peaked; by mid-March 2000, the NASDAQ Composite Index was on its way down as the gross overvaluation of companies in the Internet sector became apparent. In retrospect, the dot-com bubble bears some of the hallmarks of the classical boom-bust cycle identified by Marx, and there are significant parallels with earlier technology booms, such as the 1920s boom driven by electricity, radio, aviation and the automobile. On the other hand, the bubble's unprecedented scale and vertiginous rise were made possible by the 'acceleration of just about everything' that pedal-to-the-metal technological progress had delivered through digital networking.

The first signal that a major bubble was building was the Netscape IPO (initial public offering) in 1995. The company, which then led the browser market, gave away its best product for free, while earning hardly any revenue – yet the market valued it at US$2 billion. Soon afterwards, it became obvious that the relatively youthful World Wide Web could be more than just a tool for ancillary publishing and communication. It was the dawn of e-commerce. Low interest rates, the novelty of

the dot-com, an openness to idiosyncratic business models, predictions of astonishing growth, unbounded optimism – all fed the bubble.

Excess ruled, most dramatically in the networking hardware sector. The need for more bandwidth was indisputable. New satellites were launched and new undersea cables laid. Cities were dug up repeatedly and thick bundles of optical fibre placed next to mains water lines and gas pipes. These hugely cash-intensive investments triggered waves of mergers and acquisitions. New players, notably WorldCom, arrived on the scene to buy up older rivals, growing phenomenally quickly as a result. The expansion in data carrying capacity was by no means instantaneous, however; nor was it evenly distributed. The gigabits of new bandwidth reached only businesses for quite some time. The home truth in 1999 was that most domestic connections still relied on dial-up modems with real-world speeds of a few kilobits per second. While London's City got wired up, the consumer paid a fortune for anything more than narrowband.

The predicted consumer bonanza on the Net did not gain the expected momentum. With numerous dot-coms competing on the basis of business plans that relied on the monopolisation of a market sector through network effects, there could only ever be a few winners. The gap between expectations and reality, between the promise of unlimited connectivity and the materiality of scarce bandwidth was too large. The market collapse began in late 1999, and continued through 2000. By 2001, a majority of the dot-coms had ceased trading, ancillary industries such as advertising and shipping had made cuts, and technology experts had been laid off.

Many of the new bandwidth empires vanished into the ether, leaving behind a trail of fraudulent accounts. After conducting the largest-ever US merger (with MCI in 1997), WorldCom was caught in an $11 billion accounting scandal, and in July 2002 it filed the largest corporate bankruptcy in US history, laying off over 15,000 workers[32]. The demand for bandwidth never materialized, and some industry analysts claim that it will be decades before significant amounts of the fibre under the pavements is 'lit up'.

Ironically, if only a fraction of the bandwidth created had been deployed with greater equity, the 'digital divide' would be a far less significant issue today. Through the dot-com

[32] A year later the reformed company would be awarded a US Department of Defense contract to build a cellphone network in Iraq, while payments withheld from former employees remained outstanding. *[Ed]*

years, the idea of the Internet was radically perverted – the original vision of peer-to-peer symmetric networking has given way to an increasingly hierarchical structure encumbered with access restrictions, speed limits to manufacture scarcity, and a systemic bias in favour of downloading for consumption and against uploading[33]. The smallest Internet Service Providers (ISPs) are burdened with absurd demands to log data in compliance with 'anti-terror' legislation, while at the same time governments fail to shield them from the anticompetitive practices that keep access costs inflated. It should therefore come as no surprise that the Net – the subject and medium for a growing number of artists from the mid-1990s – became the focus of several highly critical, reflexive works, a prime example of which is ambientTV.NET's *Broadbandit Highway* (2001-06).

MILLENNIAL MEDIA ARTS: THE PRECARIOUS YEARS
Almost exactly a year after the dot-com bubble burst, ambientTV.NET premiered *Broadbandit Highway* at the *Please Disturb Me* show in the recently refurbished Great Eastern Hotel in London. The hotel offered exhibition space, intending the rooms and lobby; characteristically, Luksch, working with Ilze Black, chose instead to use one of the hotel's TV channels.

Broadbandit Highway probed the extent of online surveillance systems, proposed a paradigm of banditry on the information superhighway[34], and anticipated the Net's assimilation by the 'cathode ray nipple' of TV[35]. Images from 100 traffic webcams around the world were hijacked and diverted onto the hotel TV channel to make a continuous, live road movie. A genuinely ambient piece of television, without conventional dramaturgy, *Broadbandit Highway* extended the private space of the hotel bedroom, allowing a 'return of the real' through the opening of a hundred live-view windows onto the world. The ongoing road movie ended five years later, when the last hijacked camera went offline.

The conceptual and critical content of *Broadbandit Highway*, refracted through the anodyne delivery medium of TV, was packaged as a sugar-coated time-release capsule of discomposure. The superficially benign nature of the piece was reinforced at the opening of *Please Disturb Me*, when Supermodem (Kate Rich and Sneha Solanki) performed a live electronic soundtrack punctuated by reassuring BART[36] train announcements and bingo calls. Meanwhile, the broadbandits (Luksch and Black) held up the lobby with their powder-blue stetsons, fur jackets, and cowgirl boots. It was in this

[33] Most home – or 'consumer' – Internet connections are asymmetric, with much greater bandwidth allocated for downloading, and lack static IP addresses that are necessary to run a server to the Net.

[34] A term often attributed to Al Gore; the non-arrival of which had rendered it a joke by the mid-1990s *[Ed]*

[35] '[A] lot of people [...] think, "oh, tv means a sitcom, tv means an hour long drama, tv means the evening news". If the web is becoming like tv it is not becoming like that kind of tv. It´s becoming like the CCTV, or the Home Shopping channel or *Cops* or something like that.' Gary Wolf of *Wired Digital* interviewed by the author: 'Ambient Media or the Social Spaces of the Future'. Available at: www.heise.de/tp/r4/ artikel/3/3107/1.html 'Cathode ray nipple' is a phrase from 'Television, the drug of the nation' by The Disposable Heroes of Hiphoprisy.

[36] Bay Area Rapid Transit, the metro rail system of the San Francisco Bay.

[37] 'Flexibility was an extremely positive idea in California in the 1970s when the culture of microelectronics was invented. It was the polar opposite of the rigid 1950s [...] These were the utopian days of Bucky Fuller, Gregory Bateson and the *Whole Earth Catalog*: no-one would have dreamt that *An Ecology of Mind* could become a management tool. But the looser, more creative lifestyle did not just mean the emergence of a whole new range of products, useful for stimulating consumption. In California, and ultimately in much of the developed world, the new culture seemed to promise a way out of the social conflicts that had stalled the Fordist industrial regimes.' Brian Holmes 'Unleashing the Collective Phantoms: Flexible Personality, Networked Resistance', *Mute* magazine, 2002. www.cceba.org.ar/evento/taller007.pl

[38] '[T]he precarization of existence is reflected in the permanent instability of the most essential aspects of living that alter, in a profound manner, the very notion of a project of life, above all for young people. [...] Re-inventing the notion of living is a job that is directly connected with

performance that the metaphorical structure of *Broadbandit Highway* was fully revealed — for the technologies that surround us do appear to be mostly harmless, often enticing, even downright seductive. As it becomes slowly incorporated by the viewer, however, the work broadcasts a haunting call to alertness and reflection.

Broadbandit Highway highlighted themes and established trajectories that would be prominent in later projects. Issues of widespread surveillance, the obsolescence of the classical liberal concept of privacy, and the vulnerability of data would be radically unveiled in *Faceless* (2007). Works including *Telejam*, *AV Dinners* and *Myriorama* would deploy approaches that featured at least some of: the conscious mapping of the medium and the space of work, site-specificity, the precedence of process and performance over object, breaking of the frame, and understated critique (sometimes hidden behind scintillating manifestation).

THE CYBERPRECARIAT

Despite millennial dreams of a 'creative class', times were tough for many artists. Luksch only just managed to find a studio space through Mondial, and although technically a company owner, she and her friends were financially much closer to the precariat. 'Precarity' has become one of the key-words of a certain leftist discourse on the development of contemporary capitalism. Used narrowly, the notion refers to new labour arrangements increasingly adopted by big business and government, including reduced unionisation, exposure to hire-and-fire practices, and general depoliticisation. Whilst giving some workers a sense of freedom and operational independence, such flexible labour organisation[37] does not remedy the power imbalance within capitalism, and conditions for most workers worsen. More broadly, 'precarity' encompasses the increasing precariousness of citizenship and communication rights (brought about by state encroachment on civil liberties, and media conglomeration, respectively). While first applied to phenomena in wealthier economies, precarity describes best the situation of billions across Asia, Africa, and Latin America.[38]

It is sometimes claimed that, by choosing flexible working arrangements outside the traditional labour market, artists, designers, technology developers and other members of the creative class become (perhaps unwillingly) the vanguard of a new type of labour organisation. Occasionally, the digital artisans who produce 'cool stuff' for corporate clients are

blamed for the losses of the '68 generation and capitalism's ability to co-opt opposition:

[...T]o describe the immaterial labourer, 'prosumer', or networker as a flexible personality *is to describe a new form of alienation, not alienation from the vital energy and roving desire that were exalted in the 1960s, but instead, alienation from political society, which in the democratic sense is not a profitable affair and cannot be endlessly recycled into the production of images and emotions. The configuration of the flexible personality is a new form of social control, in which culture has an important part to play. It is a distorted form of the artistic revolt against authoritarianism and standardisation: a set of practices and techniques for 'constituting, defining, organizing and instrumentalizing' the revolutionary energies which emerged in the Western societies in the 1960s, and which for a time seemed capable of transforming social relations.*[39]

Indeed, 1990s London allowed many of these digital artisans to capitalise on the Net hype, and some 'flexibly' moved between commercial projects and their own artwork. However, others were more uncompromising and did not allow themselves to be co-opted into 'flexible' forms of control; they found themselves in the classically precarious situation of the artist. In both cases, the scarcity of skills and equipment encouraged collectivisation. Groups such as Audiorom, AntiRom, Soda and Lateral balanced artistic excellence, creative independence, and commercial allure, often cultivating corporate clients with great success. Collectives of the second type, including ambientTV.NET, were less formal groupings of individuals with (usually) convergent artistic and political goals, that typically came together around an 'arts server'[40]. Many of these collectives were attempting to mirror the new network architecture in the social realm. Holmes' critique essentially only applies to groups of the first type.

Open Source Culture: Hackers, DIY, Free Media, Art and Networks

DIY MEDIA: COMING UP AGAINST THE CRASH
The bursting of the New Economy bubble in 2000 coincided with the rise of the 'dot-org boom'[41], as participatory movements and free media hacktivists[42] emerged into the mainstream. Consume (James Steven's post-Backspace project) proposed a non-commercial model for wireless community networking, wikis

the work of reinventing spaces for collective organization that would allow us to realize these projects.' – from Martín Bergel & Julia Risler's defining text for the conference Precarity, Social Movements and Political Communication, CCEBA, Buenos Aires, May 2006. Translation: Brian Whitener *[Ed]*

[39] Brian Holmes *Hieroglyphs of the Future* (Zagreb: Arkzin/WHW, 2003)

[40] Art Servers Unlimited (ASU) (Backspace/ICA, 1998) highlighted this development and reflected on better collaboration and resource sharing. In his keynote speech at the conference, Janos Sugar borrowed Joseph Beuys' terminology to describe ASU as 'global social sculpture'. http://asu.sil.at

[41] 'dot-org boom' (parallel to dot-com but in the heart of the alt.net) is a term coined by Juha Huuskonen.

[42] hacktivist = hacker + activist. The mainstream media use 'hacker' to mean 'cyber-criminal', where instead they should use 'cracker'. A hacker develops or modifies hardware or software in the interests of efficiency, aesthetics, or security. *[Ed]*

and weblogs began to garner huge audiences of reader-writers, and the Creative Commons initiative developed copyright licences consonant with digital creation and distribution. Such initiatives championed the user as both producer and consumer. For those who had observed Net culture in the 1990s, however, little was new. Alternative or 'copyleft' models of dealing with intellectual property, such as GNU GPL, predated Creative Commons by years, and artists and hacktivists had been running Internet radio and TV stations in the 1990s. Importantly, the early history of the Internet – setting aside the military imperatives – was one of an academic culture of free exchange and discussion and freewheeling technologists (the hackers), against the backdrop of the Civil Rights movement, anti-Vietnam protests, and grassroots media initiatives. The grassroots initiatives persisted even as political unrest was put down, but the DIY culture of the Net only gathered critical mass at the turn of the millennium.

What is sold now as Web 2.0 or social software was prepared in the labs of free and open source software developers and net culture practitioners in the 1990s. At the core of these developments is a paradigm shift from a culture of consumption to a culture of co-production – Lawrence Lessig speaks of a read-and-write culture as opposed to a read-only culture. The new paradigm may also be described as 'open source culture', to highlight its origins in the early hacker culture of the Net.

OPEN SOURCE CULTURE
What I term open source culture is based on the ethics of the first and second generations of computer hackers. Hackers of the first generation developed the Unix operating system and wrote the software for the early Internet. Against hierarchical styles of management and the subordination of their art to Taylorist organisation, they put technical descriptions of the Net in the public domain. The Internet is still based on these open standards, which means that anybody who has the skills to read those documents and write software can innovate. Early hacker communities also realized the first public online community in Berkeley, and designed the machines that would eventually develop into the 'home' or personal computer.

Later, as liberty and innovation were threatened by the growth of proprietary systems from corporations such as Microsoft, Apple and AT&T, a second generation of hackers created free space by releasing an easily-licensable version of Unix, BSD (Berkeley Software Distribution) in the late 1970s.

BSD was the first distribution of Unix to include code that supported the Internet Protocol; it also contained UUCP, a technology which enabled remote computers to connect and exchange documents. UUCP was used by academic hackers to create newsgroups – electronic message boards for remote communication. Then in 1983, Richard Stallman founded the GNU[43] Project, whose goal was to establish an operating system entirely free of proprietary code. Stallman later wrote the GPL (General Public Licence) for software, which popularised copyleft – the use of copyright law to allow unrestricted modification and distribution, while preserving a similar right for other users. When the young hacker Linus Torvalds created Linux, his version of Unix kernel, he used the GPL to protect it.

[43] GNU = GNU's Not Unix. GNU GPL was a revision of Emacs GPL. *[Ed]*

In summary, open source culture nurtured the development of operating systems, the Internet, and tools for creative expansion, including licences that encouraged the development of software in the public domain. Later, the idea of copyleft was picked up by lawyers who created the Creative Commons licences, which extend the principle from software to other forms of expression, including music, text, still image and video. In the fertile 1990s, hackers, activists, and digital artists met at new type of hybrid institution then emerging. Exemplified by London's Backspace, Amsterdam's desk.nl, New York's The Thing, Lubljana's Ljudmila, and Vienna's Public Netbase, these sites began as informal, self-organising networks of collaboration, and grew to offer shared resources and the possibility of project development, eventually forming the backbone of an open lab culture that popularised and helped shape digital and social innovation. Such labs maintained their independence through a range of survival strategies including the cultivation of non-monetarian, or 'gift', economies. Through contact with artists and activists, hacking gained a broader social base; by the turn of the millennium, open source culture was fast approaching the mainstream.

CASSANDRA CALLS FROM THE DIGITAL UNDERGROUND
For decades, hacker groups such as the Chaos Computer Club (CCC) and *2600* magazine have sounded warnings about the creation of the 'glass citizen' – the individual exposed in electronic space, fully transparent to governmentality and corporate control. The massive growth of networked digital systems has increased the volume and precision of data held about people. Despite data protection laws, firewalls between different databases have been shown to be increasingly porous. Under the aegis of the 'war on terror',

states have granted themselves ever-greater rights to gather information on individuals and sift through databases in search of 'suspicious' correlations (which might have no associated causality). Liberal democracies (and the UK and US in particular) are tending towards mass surveillance states.

The growing pool of data legally held by financial, medical, and social security institutions is being augmented with records of individuals' shopping habits (store loyalty cards), communications (cellphone, email) and movements (by car, public transport or foot). Datamining techniques enable niche marketing (the targeting of individual consumers) and the invidious (and often invisible) practice of social sorting. Increasingly, biometric data (fingerprints and retinal scans) and genetic data are being collected, and surveillance is becoming automated. The recording of some of this data is now demanded by the state under questionable laws – in the UK, DNA records obtained at arrest are retained by the police even if no charges are brought – or even illegally – as in the US National Security Agency's post-9/11 domestic wiretaps.

According to philosopher Paul Virilio, we are creating a 'mechanized imaginary'[44], a mental world which is no longer human and which exists in something like a parallel universe. But this parallel world begins to exercise real power over the world in which we live. Digital access codes increasingly affect the ability to move through this world, to take the Tube or cross a border, or to obtain a service from a corporation or the state. What used to be citizen rights have become subsumed under a new regime of access management in a world full of digital borders. We have surpassed the surveillance society imagined in George Orwell's *1984* and are approaching a 'society of control'[45].

In its infancy, hacking was about freedom of movement within electronic networks. As this freedom became available through the opening of the Internet, those who had been hackers became something closer to information environmentalists. Hackers were the first to experience encroachments on rights and freedoms in the digital sphere, and highlighted key issues of surveillance and privacy, intellectual property and copyright, and freedom of speech. As artists, lawyers and academics joined in the battles, and new media labs bloomed, open source culture started to gain wider recognition. Today, once-classic hacker concerns have become issues that affect and interest everyone.

[44] 'Today it is impossible to talk about the development of the audiovisual without talking also about the development of virtual imagery and its influence on human behaviour, or without pointing to the new industrialisation of vision, to the growth of a veritable market in synthetic perception and all the ethical questions it entails. [...] Once we are definitely removed from the realm of direct or indirect observation of synthetic images created by the machine for the machine, instrumental virtual images will be for us what the foreigner's mental pictures already present: an enigma. Having no graphic or videographic outputs, the automatic perception-prothesis will function like a mechanized imaginary from which, this time, we would be totally excluded.'
Paul Virilio *The Vision Machine* (London: BFI, 1994), pp. 59–60

[45] Gilles Deleuze 'Postscript on the Societies of Control' in *October* 59, Winter 1992 (Cambridge: MIT Press)

Coalescence in the crucible

INTERDISCIPLINARY EXPLORATIONS

Mukul Patel had lived in London since 1993, but rode out the dot-com crash in Berkeley, during a spell at the University of California. He returned from the Bay Area to take refuge in an Arcadian Victorian schoolhouse off Brick Lane, home to a remarkable population of tree frogs, desert plants, dozens of tortoises, and old-school artists David Spurring and John Ashworth. One decisive night, old friend Shane Solanki invited him to DJ at the after party for the *Please Disturb Me* show. Hosted by Luksch and Black, the party cascaded down three storeys of a canalside house in Hackney while films by Shu Lea Cheang and the Chapman Brothers played on the walls, enigmatic and darkly enticing. But it was the screening of *Broadbandit Highway* that captured Patel's attention.

Over the previous decade, Patel had found himself repeatedly moving between disciplines – having studied Natural Sciences and Social & Political Sciences at King's College, Cambridge, his subsequent life in London involved being editor and writer by day, sonic explorer by night. Within music, he was drawn to the immense variety that the city offered in the early 1990s – from the Institute of Dubology to the Institute of Goa and the free/squat party scene, from Charles Hayward and Tenko at Conway Hall to the Gundecha Brothers at the Kufa Gallery[46]. These explorations brought him into unique spaces and scenes, including CoolTan Arts in Brixton and the Exploding Cinema.

Through the 1990s, Patel honed the DJ craft first exercised in the Cellars of King's College, using the mixing desk to bridge disparate forms, cultures and times. But it was not until he encountered Talvin Singh and Sweety Kapoor's *Anokha*[47] night in 1996 (then at the Blue Note, Hoxton) that he found a channel for his approach to 'music production-reproduction'[48]. The club ran on Mondays nights, for those listeners dedicated enough to sacrifice some mid-week sleep. It was a microcosm of sound: one memorable night, Patel served breakbeats to punctuate an impromptu vocal duet between Björk and the Indian ghazal singer Hariharan, with the frenetic Squarepusher on bass. Every week, there seemed to be an irruption in the musical world, the faultline spreading out from Hoxton Square.

After the closure of the Blue Note in 1997 – a victim of the suicidal ShoHo effect – *Anokha* moved to a number of larger venues. What Patel regarded as a curatorial role behind

[46] The Institute of Dubology (at the Vox, Brixton) showcased reggae, dub, and poetry from artists including Linton Kwesi Johnson, Benjamin Zephaniah and African Headcharge. The Institute of Goa was an uncompromisingly hardcore, ostensibly acid-techno night, where nevertheless tracks by Pink Floyd, Hector Zazou or Fun-Da-Mental would be woven in the mix by innovative DJs (Quark, Whirling Dervish). Drummer Charles Hayward was part of the seminal art-improv band This Heat, which also featured the late Gareth Williams. The Gundecha Brothers are Indian singers of the ancient Dhrupad form. *[Ed]*

[47] See http://ethnotechno. com/_content/ints/int_ mukul_5.20.06.php

[48] In the 1920s, Laszlo Moholy-Nagy characterised the phonograph as having 'productive-reproductive potentialities'. *[Ed]*

[49] Herbert is significant for his manifesto-driven, politically-charged musique concrète, produced under aliases including Dr. Rockit. Muslimgauze (Bryn Jones, 1961–99) released over 100 albums that brooded over the plight of Palestine. *[Ed]*

[50] Ouvroir de littérature potentielle ('workshop of potential literature'), a group of writers intrigued by maths and mathematicians intrigued by literature. Founded in 1960, members include Raymond Queneau, Marcel Duchamp, Georges Perec and Italo Calvino. *[Ed]*

[51] 'Defamiliarisation, defacilitation, retardation [...Push] the raga to the edge where, if you are less than expert, it ceases to be that raga. Push it till the familiar becomes unfamiliar, then bring it back to an enriched type of familiarity, to a re-cognition of the raga.' — Rajeev Taranath at the School of Architecture, Ahmedabad, India, 1990.

[52] In Indian art music and in Reich's 'music as a gradual process', authority is shared among composer, performer and listener. *[Ed]*

[53] Irbene and Riga, August 2001.

the decks spilled over as he began to programme the 'ambient' room in *Anokha*, and also the Sunday afternoon deep / slow / quiet listening offshoot in Brick Lane, *Calcutta Cyber Café*. There, he brought in artists ranging from sample wrangler Matthew Herbert and the late, prolific Muslimgauze[49] to electroacoustic minimalists zoviet*france, and classical Indian sarode player Sohan Nilkanth. By 1999, however, the combination of a stagnating electronic music scene and a burgeoning commercial culture had severely narrowed the scope of the club as forum, and Patel began to explore other avenues – most fruitfully, through collaborations with choreographers of contemporary dance.

The academic sojourn in Berkeley (2000–01) gave Patel the space from which to reconsider his trajectory. Serendipitously, Steve Reich was then a visiting lecturer at the Department of Music and discussed and performed several of his seminal works. Patel also encountered the Max/MSP programming environment at CNMAT (the Centre for New Music and Audio Technologies), and attended classes at the Ali Akbar College of Music in Marin County, which reinforced his passion for North Indian art music.

At Berkeley, Reich pointed Patel towards Alvin Lucier, in whose approach he found resonances with the work of Oulipo[50]. This redoubled an association between processes in literature and music across cultures, first triggered by a lecture by Pandit Rajeev Taranath entitled 'The State of the Art'[51]. Taranath, a leading sarode player and disciple of Ustad Ali Akbar Khan, had elaborated a concept of creativity within rule bound forms (specifically with reference to Indian art music) by drawing on Eliot and Russian formalist Victor Shklovsky[52].

For Patel, the decade up to 2001 had been a time of voracious input; the spell at Berkeley triggered a synthesis and the beginning of a period of practice. In late 2000, he compiled an audio sketchbook, *If on a winter's night a traveller*, a diversely-textured, filmic collage that brought together the material that had influenced him over the previous decade. This was to serve as a guide for composition – a reminder of possible modes of organisation of sound and word. But it was not until his participation with Luksch in the *acoustic.space.lab* symposium (at Ventspils International Radio Astronomy Centre in Latvia)[53] that Patel encountered a setting in which he could develop his practice equally unencumbered by disciplinary boundaries and commercial imperative.

A NEST FOR NETWORKING

In 2001, ambientTV.NET moved to a new home on the seventh (top) floor of an industrial building in South Hackney, where they established ambient.space as a studio/workshop/salon. Originally occupied by sweatshops, a few artists had established studios in the building in the late 1990s. By 2007, there were four galleries, and the majority of the occupants were engaged with either the creative industries or art.

ambient.space was ideally located for exploring the possibilities for building wireless network infrastructures[54]. The expansive view from the southern aspect of the building included the antenna mast of free2air, the open wireless access point run by Vortex in Hackney Road. Over the winter of 2001–02, ambient.space hosted a series of free networking workshops involving free2air, consume.net, *Mute* magazine's *YouAreHere* initiative and various free floating networking wizards. Obsolete computers donated by the London School of Economics, Reuters, the National AIDS Trust and others were reconfigured as routers. Antenna designs were tested and manufactured. Within a few weeks, the free network community had established ambient.space as a significant node in the growing East End Net. Many studios in the building were networked via ambient.space, and free2air provided the pipe to the Internet. In this early missionary phase of free networks in London, people were encouraged to join the community not only to get cheap or free broadband, but primarily to share: share responsibility of managing the network, share equipment, share content, share space, share the kitchen, share minds.

The early days were an intense time of networking, both in technical and social terms. There was a constant flow of people through the doors of ambient.space – to borrow cables, exchange software patches, have a cup of tea. A fortuitous conversation might extend into dinner and beyond; guests would find themselves ensconced in cushions and tapestries on the large central podium, enveloped in sound from numerous loudspeakers. Then at sunrise: stretching out in the morning sun, flying carpets over racing clouds, only to wake fully to the slam of the heavy door as the day's first visitors arrive. (The open-door policy, unusual for London, led one *Time Out* journalist to think that the space must also serve as a 'community centre'.)

At the *Calcutta Cyber Café* in 1997, Patel had invited artists and audience to kick off their shoes and recline on giant carpets.

[54] See my text 'On Free Wavelengths' in this volume.

There the tone was set by Newcastle electroacoustic duo zoviet*france, who elaborated a single pluck on a lap steel guitar into a 40 minute performance. Five years later, ambient.space provided an even more accommodating environment, and it continues to do so. The central podium can be configured as observation deck, stage, sofa, or bed as required. It has even been incorporated into an instrument, acting as one bridge of Rolf Gehlhaar's SOUND=SPACE, an ultrasonic/laser musical system that extends invisible keyboards up to the ceiling. More commonly, it serves as seating or reclining area for participants or audience.

But there can be no music without food, and the kitchen at ambient.space conjures up exceptional platters to challenge the sonic feasts. The arrival of one-time sushi chef Mariko Montpetit as resident raised the bar impossibly high – never had hacktivists been so well fed. This gastronomic seduction was complemented and complicated by bespoke cocktails developed by Vitamin AA (Anthony Auerbach). ambient.space continues to host informal, often impromptu concerts, screenings, meetings, and performances. Ambient in its fullest sense, it is an environment to facilitate artistic and intellectual exchange and stimulate the senses. The creation of such a space is an artwork in its own right, though at the time Luksch, Black, Patel, Montpetit and their collaborators did not see it as that. They just did it, rather intuitively.

Net art after the Net

Recognizing its social situatedness is at least as important for understanding ambientTV.NET's work as appreciating formal aspects. Since some of the work interrogates new communication technologies, it would seem to require positioning in relation to Net- and media art. But these categories are contentious[55] – indeed, this very categorisation is now regarded by many practitioners as leading to a ghettoisation. I will instead try to implicitly characterise the type of art ambientTV.NET creates by discussing some key features, and pointing to some artistic 'neighbours' and related practices.

In the early stages of Net art, the Internet, or more precisely the Web, was the subject of inquiry, and most works were self-referential, in and about the medium. Some of the most well recognized proponents of this movement publicly 'retired' in 1999. Since then, there has been a second phase of what

[55] 'New media art' is a thoroughly problematic term – ahistorical and suggestive of a naïve romance with technology. Laszlo Moholy-Nagy was a far more thoroughgoing 'new media artist' than the majority of those so-called today (consider his claim to have made paintings over the telephone in 1922). 'Media art' is a potentially richer category – free from the imperative to be new, divorced from the darling of the creative industries, and usually directed in a critical interrogation of 'the media'. [Ed]

I call Net art 'after the Net' (a phrase borrowed from *Mute* magazine's new slogan[56]), which continues to use the Net as a medium, but is less hermetic in its content. (The demarcation lines are not always as clear as the language suggests.)

After participating in the early phase of Net art, Luksch began to break the frame of the computer monitor (and the cinema screen) through the early ambientTV.NET projects. What has since emerged is a distinctive, coherent and critically committed body of work that stretches across genres and media. Works are bound by a common concept of 'cross-reality' – a reality crossed through by proliferating devices of mediation, but reality nonetheless: there is no dissolution into a virtual heaven. Digital networks and more tangible spaces are combined in complex and nuanced ways: by facilitating independent media infrastructure and platforms (in *ambient.wireless and Virtual Borders*), by using virtual space to extend and bridge carnal performance (*AV Dinners*), by critiquing networked systems of surveillance through dance (*Myriorama*), by hacking the control systems of corporate-governmentality (*Faceless*), or by creating a physical hub to accommodate and connect visiting artists (ambient.space).

The concern for the real is encapsulated in the 'ambient' of ambientTV.NET, which indicates a consideration of the material and informational economies that surround us. This consideration prompts critical questioning in reflective cycles. The need for reflexivity emerges from a recognition that everyday life is increasingly influenced and to some degree determined by social-technological systems[57] – a recognition accelerated, in the case of ambientTV.NET, through the use of digital networks. Reflexivity is further honed through the struggle to remain independent, which ambientTV.NET has pursued by cultivating manifold skills, relationships, networks, spaces, and gift (non-monetarian) economies.

Together with its peers (discussed below), ambientTV.NET has passed through the digital looking class to emerge on the other side of the mirror. Rather than fetishising technologies, Net art after the Net interrogates their relationship with society, and sometimes throws a bit of sand into the machine.

CREATIVE RESISTANCE
The best exemplar of such critical work in ambientTV.NET's oeuvre is the project *Faceless*, which uses the law to obtain CCTV surveillance camera recordings that are then edited into

[56] 'Culture and Politics after the Net'. In the mid 1990s, Net artists had come into being, for the most part rejecting gallery and museum (who hadn't heard of the artists, and whom the artists didn't need – or want). 'You can be a Museum, or you can be Modern, but you can't be both', said Gertrude Stein. Rejecting museums meant rejecting their framing function, seen as elitist and conservative (it also entailed a rejection of Duchamp). While the cyberpunk roots of Net art were growing out in the late 1990s, the format of the high-tech media installation continued to be fashionably collectable. Process-based Net art appeared strange and intangible, while the high-tech media installation was relatively unproblematic – a short step away from video art, works were often presented as sculpture, and authorship assigned in the tradition of fine art. But while Net art was largely highly critical, high-tech installations tended to a blind optimism, advertising the cultural value of technology as such. *[Ed]*

[57] This is an elaboration of 'second-wave' cybernetics thinking; see below for more on the cybernetic approach. *[Ed]*

a fictive film. *Faceless* is like an 'exploit' in hacker language – an act of practical critique, an inspired circumvention or subversion of norms or barriers. The use of hacks and other forms of 'creative resistance' is a technique that ambientTV.NET shares with other 'after the Net' artists and groups, including Jaromil, Ubermorgen, Heath Bunting, and Mongrel. Creative resistance can also involve enabling others to become producers: the artist, instead of expressing subjectivity or a universal, becomes facilitator and platform builder[58]. While the artists mentioned have distinct practices and do not associate as a named movement or tendency, they are bound by a common approach, of using creative resistance to illuminate issues of intellectual property and knowledge sharing.

Jaromil[59] creates software art and tools for expression and media activism. One of his exploits as hacker is an extremely terse and elegant fork bomb script – software that will make any Unix system crash – which consists only of the following 13 characters (including spaces):

:(){ :|:& };:

The other side of Jaromil's work – facilitating and platform-building – is exemplified by his *dyne:bolic* project. *dyne:bolic* is an open source 'live CD' – one that can be used to boot a computer. The CD includes the Linux operating system together with tools for multimedia production and distribution, optimised to run on old, slow computers for those with few resources[60].

Ubermorgen's[61] exploits attack corporate and governmental systems with electrifying effect. [V]ote Auction 2000 was a website that allowed US voters to sell their presidential votes online ('Bringing capitalism and democracy closer together') and, unsurprisingly, caught the attention of the FBI. *Google Will Eat Itself* (conceptually) turns the Google corporation into an autocannibalistic machine by using the income derived from serving banner ads for Google to buy Google shares. *Amazon Noir* unlocked the 'Search Inside' function on Amazon.com's site to obtain entire texts.

Variously self-described as 'net.art pioneer', 'professional revolutionary' and 'retired net.artist', Heath Bunting's[62] hacks straddle digital and material worlds. His *BorderXing Guide* consists of online documentation of walks that cross national boundaries without needing to negotiate border formalities, but the website may only be viewed from designated locations. The recent *Status Project* examines the construction of official identity through corporate and government databases.

[58] Empowered by contemporary information technologies and drawing on the rise of the participatory paradigm through the 20th century, the artist can now fully blossom in this role. See Walter Benjamin's 1934 essay 'The Author as Producer' in *Selected Writings Volume 2, Part 2, 1931–1934* (Cambridge, MA: The Belknap Press, 2005)

[59] http://rastasoft.org

[60] I have written about the work of Jaromil more extensively in 'Root/s Culture', first published in M. Narula, S. Sengupta, J. Bagchi & G. Lovink, eds. *Sarai Reader 05: Bare Acts* (New Delhi: Sarai Media Lab, 2005). 'Root/s Culture' was originally written for Marleen Wynants and Jan Cornelis, eds. *How Open is the Future? Economic, Social & Cultural Scenarios inspired by Free and Open Source Software* (Brussels: Crosstalks, VUB Brussels University Press, 2005).

[61] www.ubermorgen.com

[62] www.irational.org

Mongrel[63] began discussing social software long before the term was taken over by the Web 2.0 industry, and its meaning completely twisted. With *Linked*, *9Nine* and *Skint Stream*, Mongrel created participatory platforms for workshops and projects spanning the world, from council flats in London to the suburbs of Amsterdam, from Johannesburg to Jamaica. An ongoing project is MediaShed, a space dedicated to free media in Southend-on-Sea.

Despite obvious differences in practice, there is much common conceptual ground between ambientTV.NET and the other artists cited. Although not fundamentalist about free software, the work of ambientTV.NET is allied with the free media thinking championed by both Mongrel and Jaromil: *Stealth Waltz*[64], made for the 2002 *Kingdom of Piracy* exhibition, illustrates the point. Luksch and Patel also follow a clear open content strategy: most ambientTV.NET works that are offered for sale as objects may also be freely downloaded from the website. Like Heath Bunting, ambientTV.NET strives to demarcate an arena for free action. This is not constructed primarily as a space for personal gratification, but rather to maintain a sustainable living and working environment while avoiding alienated labour or co-optation by commercial interests. Such conditions need to be maintained constantly, and this task becomes part of every new work (there is a reflexivity here). And while many of Ubermorgen's works are online hacks, ambientTV.NET uses a range of different media including film, dance, and sound art. But underlying these various manifestations is a similar critique of extant social and technical infrastructures. Just as in the 'systems', 'process' and 'participatory' art of the 1960s–70s, in the critical art of the early 21st century – Net art after the Net – the social and political aspects of practice do not overshadow the experimental and creative engagement with new forms; indeed, out of this orientation emerges a radical vision that fuses the aesthetic and the ethical – an art for producers, not spectators[65].

Before proceeding to a theoretical sketch to help frame what has been discussed so far, I will summarize the important aspects of ambientTV.NET's work as I have characterised it:
1. While much of the work deals with communication technologies, this is not a privileged point from which engagement with the world proceeds; instead, ambientTV.NET applies a cross-reality concept, exemplifying what I term 'Net art after the Net'.
2. There is a critical interrogation of technology, which comes from a systemic reflexivity about ambientTV.NET's own role and sustainability.

[63] See www.mongrel.org.uk and www.mongrelx.org

[64] In this fictional scenario, all folk music has been removed from the public realm, but a renegade corporation continues to freely distribute music in the proscribed time signatures by embedding it steganographically in 'legal' music.

[65] The critical artists of the early 21st century could be described as taking the epistemological excursion of minimalism (Hal Foster's characterisation) and, reprising another theme of 1960s–70s art, directing it towards social–technological systems. *[Ed]*

3. This critical stance leads to acts of creative resistance – finding systemic exploits or hacks, or building alternative platforms and infrastructure.
4. Teaching, sharing and facilitating are important parts of the practice, enabling others to appropriate technology for liberating purposes rather than becoming ever more dominated by it.
5. There is a rejection of the intellectual property dogma that the 'content provision' industry clings to, in favour of free (libre) media and free software culture.

THE THINGNESS OF THINGS
The wealth of bourgeois society, at first sight, presents itself as an immense accumulation of commodities, its unit being a single commodity. Every commodity, however, has a twofold aspect – use-value and exchange-value.[66]

[66] Karl Marx *Critique of Political Economy. Part I The Commodity* (1859) online at www.marxists.org/archive/marx/works/1859/critique-pol-economy/ch01.htm

There is at work in contemporary capitalism a very powerful ideology, which combines commodity fetishism and technological determinism to construct a vision of continuous progress through technical innovation. The icons of commodity fetishism are cars and consumer electronics. TV advertisements for these products are the most self-revealing in this regard: in the ads, humans are mere bystanders, while the gadgets do all the singing and dancing. Consumer fetishes are seen as agents of historic progress, but this same agency is denied to humans. From the transistor radio to the Sony Walkman and Apple's iPod, gadgets have captured not only the market but also imaginations. Corporations and marketing agencies have succeeded in manufacturing products that are keys to personal identities. The medium as the message and the massage – in a continually recycled and trivialised McLuhanism – has become a privileged factor in determining human history. McLuhan posited that all technologies were extensions of the nervous system, electronic prostheses, and that different media impacted directly on our ways of perceiving and acting in the world. The proportionate relationship between our senses would determine the ways societies developed. McLuhan saw the 'visual' age of the book in decline while new electronic media – TV, radio and, imagined in an iconic rather than any real form, the Net – would shift the balance towards a more immersive media-scape that favoured the ear and would bring about a new age of instant connectedness between all people. McLuhan's thesis is sweepingly general; however, what he wrote between 1958 and 1964 has had a profound impact on the active making and doing of people in the world and continues to shape

the discourse around new media. The main bug in McLuhan's media theory is its totalitarian tendency – he sees media as the only important factor which shapes history, thereby denying the role of human agency. This way of thinking is called media determinism or, more generally, technological determinism[67].

In *Das Kapital Volume 1*, Marx explains how it comes about that the 'thingness' of products is so deceiving. Since the value of a thing is expressed through its price only, the labour that went into producing it is hidden from sight. Where consumer electronics are concerned, this process bears the signs of sustained accumulation over a long period of time. Not only does the gadget hide the labour of the people who manufactured it, but also centuries of scientific research and development. From the discovery of electricity and radio waves, to the invention of batteries and communication protocols, to the production process and the machines necessary to carry it out, thousands of years of dead labour went into the latest cellphone.

Behind the trendy, cooked-up McLuhanism reinvented as the ideology of the Net lurk hundreds of years of Cartesianism and scientific positivism. At its foundation lies the subject-object dichotomy inherited from Greek philosophy. The world of things is considered to be 'objective', whereas the human world, the social, is 'subjective' and the studies that deal with it, correspondingly less scientific. With our subjectivity we can grasp an understanding of the objective laws of nature only through the scientific method. Technologies use the forces of nature in an intelligent way to transform matter. Conventional thinking positions technology in the world of things, categorically separated from the social. Thus, the scientific world-view and commodity capitalism conspire to fetishise new media technologies as 'things' which belong to an objective reality and exert a determining influence on human life.

The uncritical acceptance and celebration of new technologies by many new media artists only continues this fetishisation. The path of the artists discussed above is different – they scrutinise the intersection of the technical and social, and intervene to reveal the assumptions about or directives towards human behaviour contained there. Technologies are far from being neutral, but have been developed through specific forms of the forces and relations of production. They tend to be deployed in order to sustain these relationships in a historically contingent system of alienation. A specific task of critical art is to lay bare the mystification of the 'thingness

[67] Armin Medosch, 'Technological Determinism in Media Art' (MA dissertation, 2005) online at http://ung.at/cgi-bin/twiki/view/Main/

of things' through creative resistance, by subverting the established order or by proposing altogether different strategies for techno-social development.

This rethinking of the technical and the social as not categorically separated but intimately linked is backed up by recent work in science studies[68]. Science studies analyses scientific research activity and the make-up of the techno-scientific global laboratory. Contemporary theories in science studies suggest that we need to abandon the subject-object dichotomy in favour of a networked model of mutual relationships between things – objects, people, animals, and machines. There are strong parallels between these theories and the work of the critical artists of the artists mentioned above. The artists approach is typically practical and situated, and not at the level of abstract critique – they expose the social content of technology in a way which can be literally grasped, for example by playing the strings of ambientTV.NET's razor-wire harp (an instrument of the *Orchestra of Anxiety*). Through experimentation and practical action, these artists are doing science studies' dirty work. Through creative resistance, critical artists are (re-)socialising technologies, and importantly, democratising access to digital realms where, increasingly, desire, agency, and identity – or the non-fulfilment or lack of these – are located.

THE SYSTEMS APPROACH
In the late 1960s and early 1970s, artist, curator and theorist Jack Burnham wrote about a shift in art practice from the making of objects to the establishment of systems, from product to process – the rise of 'systems aesthetics'[69]. Burnham's systems aesthetics speaks about art that engages in an open-ended manner with its environment (so that the context of the work affects it over its duration); it signals a move away from formalism, representation and simulation towards emulation and parasitic siting. Writing then about artists such as Hans Haecke, Burnham's formulation of systems aesthetics finds renewed application in the interpretation of today's Net artists 'after the Net'. The digital network is the host for 21st century critical-parasitical works such as *Broadbandit Highway* and *Amazon Noir*.

Burnham reflected more generally on the changing conditions for artists – and, accordingly, their changing role – in the highly industrialised societies of the 1960s. Referring to the economist J. K. Galbraith, who posited that 'an incipient

[68] See the work of Bruno Latour, Donna Haraway and others; for a good summary: Jutta Weber *Umkämpfte Bedeutungen* (Frankfurt: Campus Verlag, 2003)

[69] Jack Burnham, 'Systems Esthetics', *Artforum* September 1968, reprinted in Donna De Salvo, ed. *Open Systems: Rethinking Art c. 1970* (London: Tate Publishing, 2005)

technocracy shaped by the evolving technostructure' (whether that of Californian think tanks or Soviet futurologists) was 'smoothly implementing social change', Burnham remarked that 'power resides less in the control of the traditional symbols of wealth than in information.'[70]

This statement is an early example of what has evolved into current day 'informationalism'. The assertion that we live in an 'information society' is so familiar that we may be seduced into believing that it is simply a statement of fact. However, it is no less ideological a doctrine than Marxism or neoliberalism. Endorsing Galbraith's 'technocracy' and adopting a world-view heavily informed by third-wave cybernetics[71] or 'systems thinking', Burnham sees a special role for the artist. He postulates that we are moving from an 'object-oriented to a systems-oriented culture'[72]. Under such conditions, the artist should 'liquidate [their] position as artist vis-a-vis society', and instead start making aesthetic enquiries about the future of technology – in other words, join the technocracy:

Gradually this strategy transforms artistic and technological decision-making into a single activity – at least it presents the alternative in inescapable terms. [...] Progressively the need to make ultrasensitive judgements as to the uses of technology and scientific information becomes 'art' in the most literal sense.[73]

The elitism of this statement and its relationship to McLuhanism are clear. But it also anticipates (in a manner that Burnham may not have expected) contemporary critical art practices. ambientTV.NET and its peers make judgements about, or suggest interpretations of, technologies, but outside the official context of scientific research and technocratic rule.

German sociologist Niklas Luhmann, similarly influenced by cybernetics, was the first to render a systems approach in the terms of social theory. Luhman understands systems as generalised symbolic orders that are self-organising, and significantly, autopoietic (self-generating). Within his theory, Luhmann also explains the autonomy of art. He places the trajectory of art alongside the development of bourgeois society in modernity. Differentiation enabled art to become a system whose values are defined from within, guaranteeing its autonomy. In the past, the art system's competency and distinctiveness lay in its unique ability to make aesthetic judgements (beautiful/ugly) – the second most important opposition being that between truth and falsity (from the old

[70] ibid., p. 166

[71] Cybernetics (as defined by Norbert Wiener, who established it as a discipline) is the study of control and communication processes in living or non-living systems. A key feature of such processes is feedback. *[Ed]*

[72] Burnham, op. cit., p.165

[73] ibid., p.166

[74] Hal Foster describes this phenomenon as a shift from the criterion of quality to one of interest. [Ed]

[75] Niklas Luhmann, 'Ist Kunst codierbar' in *Aufsätze und Reden* (Stuttgart: Reclam, 2004), pp. 159–197. First published in Luhmann *Soziologische Aufklärung 3: Soziales System Gesellschaft, Organisation*, pp. 245–266 (Opladen: Westdeutcher Verlag, 1981)

[76] Benedict Seymour and David Panos have explored the territory as The London Particular: 'As [Western cities] lose their remaining manufacturing base and more and more middle class service jobs migrate to Asia many have been forced to re-brand as 'Cities of Ideas'. [...] Seen in this context Creative London is far from being a manifesto for dynamism. Rather it is a defensive strategy that seems unlikely to deliver much apart from increased precariousness for the majority of working Londoners.' – From David Panos 'Creative Clusters', available from http:/thelondonparticular. org/items/ creativeclusters.html [Ed]

Hegelian philosophy of art). Luhmann goes on to identify other value pairs that play increasingly important roles in the 20th century, as artists subscribe to an anti-aesthetics and make social change their main objective. Thus, for many movements in art, the main value pair is now socially progressive/ regressive[74]. Luhmann's fear is that by abandoning aesthetics, art loses what makes it unique. If society as a whole becomes the canvas on which an artist wishes to paint, the artwork might become indistinguishable from everyday life[75].

ambientTV.NET's works interrogate both the value pairs, progressive/regressive and beautiful/ugly; they have not abandoned aesthetic sensibility, but rather deployed it as part of a holistic practice based in social critique. While they do not directly reference Burnham, Luhmann, or cybernetics, their oeuvre signals a return to and a going beyond of 1960s-70s radicalism. Traces of Hans Haecke and Martha Rosler, and the revisitation of cornerstone issues such as free media and self-organisation, are evident. But this is not a simple return. Despite everything cybernetic being terribly intellectually fashionable these days, and no page of the Macy Conferences transcripts remaining unturned, the locus of critical art practice has shifted from 'system' to 'Net' – in anticipation of (and in response to) a parallel shift in the socioeconomic realm.

Reality Check

The core of ambientTV.NET has stabilized around Luksch and Patel, with the artists continuing their practice from ambient. space, while maintaining the website as a publishing portal, and 'Ambient Information Systems' as production company. As pressure on land increases in the city, they continue to explore ways of weaving the studio into the fabric of their envisioned social and technical infrastructure. In 2008, ambient.space – always something of a caravanserai for digital nomads – hosted a series of artists-in-residence. Extending an idea of Wolfgang Staehle's (one of the participating artists), the guests were invited to address the view from the studio out over a city undergoing rapid redevelopment for the 2012 Olympics.

South Hackney continues to attract artists, ahead of and behind whom scurry the developers. And just as in ShoHo, the development of a creative hub has further marginalised old inhabitants. Against a background of spiralling property prices,

local authorities have colluded with (often offshore) investors, offering them premises at below auction value while turning a blind eye to evictions of long-standing tenants[76]. Broadway Market is one of the front lines – a street of betting shops and lifestyle vendors, greasy spoons and delis, cheap corner stores and extortionate real estate agents, and since 2004, home to a vibrant weekly farmers' market. The produce may be local and organic, but the landlords are absentees (in the Bahamas, in Moscow), and the development, cynically planned. Two established businesses, Francesca's Cafe (run by Tony Platia for over 30 years) and Spirit's Nutritious Food Gallery, became cause célèbres, with novelist Hari Kunzru writing of attempts to evict them in *The Guardian*[77]. While Spirit has managed to eke out his tenancy into late 2008 (despite a possibly illegal rejection of his offer to buy, and massive rent increases), Tony was evicted in 2005 and the cafe demolished, despite a spirited occupation of the building. Three years later, Spirit lost his premises too. The gentrification of Broadway Market, and the explosion of (New York) Chelsea-style galleries along neighbouring Vyner street – points to a future like that of ShoHo.

This intensification of life on the street is also reflected in the corridors of power. The subsumption of all artistic activity under the term 'creative industries' continues, despite evidence that they have not delivered the market miracle hoped for by government. The effects of the new economy bust hit the creative industries in 2002 when, against the predicted annual increase in employment of 6% (a valid figure for 1997–2000), some sectors (including broadcast) actually contracted. In 2005, The European Institute for Progressive Cultural Policies published a report (*European Cultural Policies 2015*)[78] that reveals what the phantasm of the creative class has done to politicians and art administrator's minds. Not only does the 'clear trend of instrumentalisation of art on part of the state'[79] continue, but also 'the classic humanist-bourgeois tradition of supporting "non-mainstream" work and art with a narrow public has now been replaced by economic and functionalist attitudes and actions.'[80] Author Gerald Raunig expects that 'there will be an even closer interweaving of these three lines of identity culturalism, governmentality control, and renewed authoritarian intervention on the part of a nation-state otherwise staging its retreat.'[81] In the same publication, Rebecca Gordon Nesbitt hedges the suspicion that 'the Arts Council England is preemptively exempting itself from support' before it is shut down for good.

[77] 'Market Forces', *The Guardian*, 7 December 2005 www.guardian.co.uk/g2/story/0,,1660371,00.html and
'A dispatch from Tony's cafe', *The Guardian*, 6 January 2005 www.guardian.co.uk/society/2006/jan/05/regeneration.g2

[78] Maria Lind &Raimund Minichbauer, eds. *European Cultural Policies 2015: A Report with Scenarios on the Future of Public Funding for Contemporary Art in Europe* (London, Stockholm, Vienna: eipcp, 2005)

[79] ibid., p 8

[80] ibid., p 9

[81] ibid., p 29

[82] Theodor Adorno 'Culture and Administration' in *The Culture Industry: Selected Letters on Mass Culture*, p. 93 (London: Routledge, 1991)

[83] McLuhan usefully described art as a counter-environment that renders visible what is normally hidden. But the cultural logic of late capitalism is such that it devours everything, including its critiques, and refashions and commodifies them. *[Ed]*

[84] Hirschhorn interviewed by Okwui Enwezor in James Rondeau & Suzanne Ghez, eds. *Jumbo Spoons and Big Cake* (Chicago: Art Institute of Chicago, 2000)

Whoever speaks of culture speaks of administration as well, whether that is his intention or not.[82]
– The necessity for uncompromising political art continues to grow with late capitalism's increasing capacity to absorb and commodify critique. But this critique must be folded in ever more, to expose minimal surface to capital's corrosiveness[83]. Too commonly today, artists' autonomy trumps social and political engagement (or lack of it). The slogan 'you call it art/ we call it independence' indicates that ambientTV.NET has attempted to set itself up as a counter-environment to 'reclaim the world' (as Thomas Hirschhorn demands contemporary art must do)[84]. Luksch and Patel declare autonomy to be a necessary precursor to engagement – not an alternative to it. Their engagement involves playing with and critiquing existing social-technical infrastructures and envisioning tenable alternatives. This maturing practice suggests a strategy for critical art that may spawn further islands of freedom in the Net.

D'où venons-nous? Que sommes-nous? Où allons-nous?
(Peter Grech, 2007)