

More Brilliant than the Sun amplifies the disconcerting strangeness of today's music. Where most music writing absorbs the future shock of Sun Ra, Alice Coltrane, Lee Perry, Dr Octagon, Tricky, Parliament, Goldie, Underground Resistance and other Afrofuturist audionaries, Kodwo Eshun breaks brand new ground by activating the concepts these figures themselves invented, assembling an entirely new field which he terms sonic fiction: the intersection between science fiction and sound. *More Brilliant than the Sun* explores the new kinds of perception that emerge from this breakthrough: the machine mythologies and the cyborg mindstates, the Unidentified Audio Objects and the sensory lifeforms thrown into earshot by a sonic world long since blown to pieces. *More Brilliant than the Sun* is a machine for travelling at the speed of light; Press REWIND if you don't remix your mind.

MUSIC
ML
3470
.E85x
1998

More Brilliant Than The Sun:
Adventures In Sonic Fiction:
Kodwo Eshun



**More Brilliant Than The Sun:
Adventures In Sonic Fiction:**
Kodwo Eshun

Cover photograph: Saturn's rings from *Polymer II*,
courtesy of Jet Propulsion Laboratory, USA

Author photograph: Dieter Mohr

Cover design: Namara

ISBN: 0 7043 8025 0

£10.00

9 780704 380257



More Brilliant Than The Sun: Adventures In Sonic Fiction: Concept Engineered By Kodwo Eshun

More Brilliant Than The Sun is a machine for travelling at the speed of thought, a probe for drilling into new levels of possibility space. 'Its mission is to undermine the concepts this present has of "Health" and "Culture" and to excite mockery and hatred against these hybrid monsters of concepts.'



Quartet Books

First published in Great Britain by
Quartet Books Limited in 1998
A member of the Namara Group
27 Goodge Street
London W1P 2LD



Reprinted 1999

Copyright © by Kodwo Eshun 1998

All rights reserved. No part of this book may be reproduced in any form or by any means without the prior written of the publisher.

The moral right of the author has been asserted.

Every effort has been made by the publishers to clear permission for the use of the photograph on the front cover of this book. The owner is invited to submit a claim for reproduction fees.

A catalogue record for this book is available from the British Library

ISBN 0 7043 8025 0

Printed and bound in Great Britain by
Creative Print and Design Wales, Ebbw Vale

DISCONTENTS

00[-007] Operating System for the Redesign of Sonic Reality

01[001] World 4: Mutantextures of Jazz

Anachronic Cybernetics of the World: George Russell

Electronic Swarm Program: Teo Macero & Miles Davis, Herbie Hancock

02[013] Transmaterializing the Breakbeat

The Metamorphonic Machine is Motion-Capturing Your Nervous System:

Grandmaster Flash, Knights of the Turntable

Kidnapped by the Kinaesthetics of the Break: Mantronix and

Chep Nunez

03[025] Sampladelia of the Breakbeat

Intensify the Phonotron: Ultramagnetic MCs

Assemble the Cryptogrammatron: Rammellzee

Escape into Psychopathogenetics: Dr Octagon

BodhiSativa Explosion in Slow Motion: Cypress Hill, The RZA,

Gravediggaz, Sunz of Man

Boll Weevil Computer Brain: Funkadelic

Chase Through the Headphones: Tricky

04[062] Inner Spatializing the Song

[Towards a] MythScience of the Mixing Desk: The Upsetter

05[067] Virtualizing the Breakbeat

Wildstyle Adventures in the Hyperdimensions of the Breakbeat:

4 Hero, Rob Playford and Goldie, A Guy Called Gerald

06[078] Programming Rhythmic Frequencies

Migration Paths Across the Vocoder Spectrum: Cybotron, Zapp,
Drexciya

Rhythmic Bachelor Machines: Kraftwerk

Machine Tones for Psychic Therapy: The Jungle Brothers

07[093] Synthetic Fiction/Electronic Thought

Abduction by Acid [Curfew]: Phuture, Bam Bam, Slezzy D
...And Came Down in Techno City: Cybotron, Model 500,
Electrifying Mojo

Inside the Sanctuary of Shockwave: The Bomb Squad

The Final Transmission from the Forever War:

Underground Resistance

Unknown Force: Offworld Mass: Oncoming Motion: Scientist

Materializing Offworld Revolutions: X-102 Discovers

'The Rings of Saturn'

08[138] Mixadelic Universe

We Are in Your System: Parliament

09[154] Synthesizing the Omniverse

[Dialogues Concerning] New World System Builders: Sun Ra

10[164] Cosmology of Volume

The Cosmic Communications Medium is an Evolution Engine:

Alice Coltrane

Coltrane Liquid Computer: John Coltrane

Shooting the Sun with a Miniature Sextant: Pharoah Sanders

A[175] Motion Capture (Interview)

B[195] Assembling the Connection Machine

C[215] Datamining the Inforeverse

OPERATING SYSTEM FOR THE REDESIGN OF SONIC REALITY

Respect due. Good music speaks for itself. No SleeveNotes required. Just enjoy it. Cut the crap. Back to basics. What else is there to add?

All these troglodytic homilies are Great British cretinism masquerading as vectors into the Trad Sublime. Since the 80s, the mainstream British music press has turned to Black Music only as a rest and a refuge from the rigorous complexities of white guitar rock. Since in this laughable reversal a lyric always means more than a sound, while only guitars can embody the zeitgeist, the Rhythmachine is locked in a retarded innocence. You can theorize words or style, but analyzing the groove is believed to kill its bodily pleasure, to drain its essence.

Allegedly at odds with the rock press, dance-press writing also turns its total inability to describe any kind of rhythm into a virtue, invoking a white Brit routine of pubs and clubs, of business as usual, the bovine sense of good blokes together. You can see that the entire British dance press – with its hagiographies and its geographies, its dj recipes, its boosterism, its personality profiles – constitutes a colossal machine for maintaining rhythm as an unwritable, ineffable mystery. And this is why Trad dance-music journalism is nothing more than lists and menus, bits and bytes: meagre, miserly, mediocre.

All today's journalism is nothing more than a giant inertia engine to put the brakes on breaks, a moronizer placing all thought on permanent pause, a *futureshock absorber*, forever shielding its readers from the future's cuts, tracks, scratches. Behind the assumed virtue of keeping rhythm mute, there is a none-too-veiled hostility towards analyzing rhythm at all. Too many ideas spoil the party. Too much speculation kills 'dance music', by 'intellectualizing' it to death.

The fuel this inertia engine runs on is fossil fuel: the live show, the proper album, the Real Song, the Real Voice, the mature, the musical, the pure, the true, the proper, the intelligent, breaking America: all notions that stink of the past, that maintain a hierarchy of the senses, that petrify music into a solid state in which everyone knows where they stand, and what real music really is.

And this is why nothing is more fun than spoiling this terminally stupid sublime, this insistence that Great Music speaks for itself.

At the Century's End, the Futurhythmachine has 2 opposing tendencies, 2 synthetic drives: the Soulful and the Postsoul. But then all music is made of both tendencies running simultaneously at all levels, so you can't merely *oppose* a humanist r&b with a posthuman Techno.

Disco remains the moment when Black Music falls from the grace of gospel tradition into the metronomic assembly line. Ignoring that disco is therefore *audibly* where the 21st C begins, 9 out of 10 cultural crits prefer their black popculture humanist, and emphatically 19th C. Like Brussels sprouts, humanism is good for you, nourishing, nurturing, soulwarming – and from Phyllis Wheatley to R. Kelly, present-day R&B is a perpetual fight for human status, a yearning for human rights, a struggle for inclusion within the human species. Allergic to cybersonic if not to sonic technology, mainstream American media – in its drive to banish alienation, and to recover a sense of the whole human being through belief systems that talk to the 'real you' – compulsively deletes any intimation of an AfroDiasporic futurism, of a 'webbed network' of computerhythms, machine mythology and concepttechnics which routes, reroutes and criss-crosses the Black Atlantic. This digital diaspora connecting the UK to the US, the Caribbean to Europe to Africa, is in Paul Gilroy's definition a 'rhizomorphic, fractal structure', a 'transcultural, international formation.'

The music of Alice Coltrane and Sun Ra, of Underground Resistance and George Russell, of Tricky and Martina, comes from the Outer Side. It

alienates itself from the human; it arrives from the future. Alien Music is a synthetic recombinator, an applied art technology for amplifying the rates of becoming alien. Optimize the ratios of excentricity. Synthesize yourself.

From the outset, this Postsoul Era has been characterized by an extreme indifference towards the human. The human is a pointless and treacherous category.

And in synch with this posthuman perspective comes Black Atlantic Futurism. Whether it's the AfroFuturist *concrète* of George Russell and Roland Kirk, the Jazz Fission of Teo Macero and Miles Davis, the World 4 Electronics of Sun Ra and Herbie Hancock, the Astro Jazz of Alice Coltrane and Pharoah Sanders, the cosmophononic HipHop of Dr Octagon and Ultramagnetic MCs, the post-HipHop of The Jungle Brothers and Tricky, the Spectral Dub of Scientist and Lee Perry, the offworld Eléctro of Haashim and Ryuichi Sakamoto, the despotic Acid of Bam Bam and Phuture, the sinister phonoseduction of Parliament's Star Child, the hyperrhythmic psychedelia of Rob Playford and Goldie, 4 Hero and A Guy Called Gerald, Sonic Futurism always adopts a cruel, despotic, amoral attitude towards the human species.

In fact the era when the History of HipHop could exhaust Machine Music is long over. All those petitions for HipHop to be taken seriously, for the BBC to give Techno a chance, for House to receive a fair hearing: this miserable supplication should have ended years ago. For there's nothing to prove anymore: *all* these Rhythmachines are *globally* popular now.

So no more forcefeeding you Bronx fables and no more orthodox HipHop liturgies. There are more than enough of these already. Instead *More Brilliant than the Sun* will focus on the Futurhythmachines within each field, offering a close hearing of music's internal emigrants only. The Outer Thought of Tricky, the Jungle Brothers with their remedy for HipHop gone illmatic, Aerosoul art theorist Rammellzee and his mythillogical systems of Gothic Futurism and *Ikonoklast Panzerism*. No history of Techno, however compelling, but instead a zoom in on the Underground Resistance WarMachine, on the Unidentifiable Audio Object of *X-102 Discovers 'The Rings of Saturn'*. No pleas for Jungle to be accorded proper respect, but rather a magnification of certain very particular aspects of its hyperdimensionality, in 4 Hero, A Guy Called Gerald, Rob Playford and Goldie.

The history book that crams in everything only succeeds in screening out the strangeness of the Rhythmachine. In its bid for universality, such a book dispels the artificiality that all humans crave.

By contrast, *More Brilliant* goes farther in. It lingers lovingly inside a single remix, explores the psychoacoustic fictional spaces of interludes and intros, goes to extremes to extrude the illogic other studies flee. It happily deletes familiar names [so no Tupac, no NWA] and historical precedence [no lying griots, not much King Tubby, just a small side bet on the Stockhausen sweepstakes]. It avoids the nauseating American hunger for confessional biography, for 'telling your own stories in your own words'. It refuses entry to comforting origins and social context.

Everywhere, the 'street' is considered the ground and guarantee of all reality, a compulsory logic explaining all Black Music, conveniently mishearing antisocial surrealism as social realism. Here sound is unglued from such obligations, until it eludes all social responsibility, thereby accentuating its unreality principle.

In CultStud, TechnoTheory and CyberCulture, those painfully archaic regimes, theory always comes to Music's *rescue*. The organization of sound is interpreted historically, politically, socially. Like a headmaster, theory teaches today's music a thing or 2 about life. It subdues music's ambition, reins it in, restores it to its proper place, reconciles it to its naturally belated fate.

In *More Brilliant than the Sun* the opposite happens, for once: music is encouraged in its despotic drive to crumple chronology like an empty bag of crisps, to eclipse reality in its wilful exorbitance, to put out the sun. Here music's mystifying illogicality is not chastised but systematized and intensified – into MythSciences that burst the edge of improbability, incites a proliferating series of mixillogical mathemagics at once maddening and perplexing, alarming, alluring.

MythScience is the field of knowledge invented by Sun Ra, and a term that this book uses as often as it can. A sample from Virilio defines it very simply: 'Science and technology develop the unknown, not knowledge. Science develops what is not rational.' Instead of theory saving music from itself, from its worst, which is to say its best excesses, music is heard as the pop analysis it already is. Producers are already pop theorists: Breakbeat producer Sonz of a Loop da Loop Era's term *skratchadelia*, instrumental HipHop producer DJ Krush's idea of *turntabilization*, virtualizer George Clinton's studio science of *mixadelics*, all these concepttechnics are used to excite theory to travel at the speed of thought, as sonic theorist Kool Keith suggested in 1987. TechnoTheory, CultStuds *et al* lose their flabby bulk, their lazy, pompous, lard-arsed, top-down dominance, becoming but a single component in a

thought synthesizer which moves along several planes at once, which tracks Machine Music's lines of force.

Far from needing theory's help, music today is already *more* conceptual than at any point this century, pregnant with thoughtprobes waiting to be activated, switched on, misused.

So *More Brilliant than the Sun* draws more of its purpose from track subtitles than from TechnoTheory, or even science fiction. These *concepttechnics* are then released from the holding pens of their brackets, to migrate and mutate across the entire communication landscape. Stolen from Sleevenote Manifestos, adapted from label fictions, driven as far and as fast as possible, they misshape until they become devices to drill into the new sensory experiences, endoscopes to magnify the new mindstates Machine Music is inducing.

More Brilliant than the Sun's achievement, therefore, is to design, manufacture, fabricate, synthesize, cut, paste and edit a so-called artificial discontinuum for the Futurhythmachine.

Rejecting today's ubiquitous emphasis on black sound's necessary ethical allegiance to the street, this project opens up the new plane of Sonic Fiction, the secret life of forms, the discontinuum of AfroDiasporic Futurism, the chain reaction of PhonoFiction. It moves through the explosive forces which technology ignites in us, the temporal architecture of inner space, audiosocial space, living space, where postwar alienation breaks down into the 21st C alien.

From Sun Ra to 4 Hero, today's alien discontinuum therefore operates not through continuities, retentions, genealogies or inheritances but rather through intervals, gaps, breaks. It turns away from roots; it opposes common sense with the force of the fictional and the power of falsity.

One side effect of the alien discontinuum is the rejection of any and all notions of a compulsory black condition. Where journalism still insists on a solid state known as 'blackness', *More Brilliant* dissolves this solidarity with a corpse into a *fluidarity* maintained and exacerbated by soundmachines.

Today's cyborgs are too busy manufacturing themselves across time-space to disintensify themselves with all the Turing Tests for transatlantic, transeuropean and transafrican consciousness: affirmation, keeping it real, representing, staying true to the game, respect due, staying black. Alien Music today deliberately fails all these Tests, these putrid corpses of petrified moralism: it treats them with utter indifference; it replaces them with nothing whatsoever.

It deserts forever the nauseating and bizarre ethic of 'redemption'. AfroDiasporic Futurism has assembled itself along inhuman routes, and it takes artificial thought to reveal this. Such relief: jaws unclench, as conviction collapses.

Where crits of CyberCult still gather, 99.9% of them will lament the disembodiment of the human by technology. But machines *don't* distance you from your emotions, in fact quite the opposite. Sound machines make you feel *more* intensely, along a broader band of emotional spectra than ever before in the 20th Century.

Sonically speaking, the posthuman era is not one of disembodiment but the exact reverse: it's a *hyperembodiment*, via the Technics SL 1200. A non-sound scientist like Richard Dawkins 'talks very happily about cultural viruses,' argues Sadie Plant, 'but doesn't think that he himself is a viral contagion.' Migrating from the lab to the studio, Sonic Science not only talks about cultural viruses, it is itself a viral contagion. It's a sensational infection by the spread of what Ishmael Reed terms antiplagues.

Machine Music doesn't call itself science because it controls technology, but because music is the artform most thoroughly undermined and recombined and reconfigured by technics. Scientists set processes in motion which swallow them up: the scientist's brain is caught up in the net. Acid's alien frequency modulation turns on its dj-producers Phuture and Sleezy D and begins to 'stab your brain' and 'disrupt thought patterns'.

Yet in magnifying such hitherto ignored intersections of sound and science fiction – the nexus this project terms Sonic Fiction or PhonoFiction – *More Brilliant* paradoxically ends up with a portrait of music today far *more* accurate than any realistic account has managed. This is because most recent accounts of Black Music – those which form the dominant humanist strain in the commemoration of Black Music, its official histories – are more than anything wish fulfilments: scenarios in which Acid never existed, in which Electronic Jazz never arrived, in which the Era of the Rhythmachine *never happened*.

By contrast, *More Brilliant* is a mechanography, an omnidirectional exploration into mechano-informatics, the secret life of machines which opens up the vast and previously unsuspected coevolution of machines and humans in late 20th C Black Atlantic Futurism.

Alien Music is all in the breaks: the distance between Tricky and what you took to be the limits of Black Music, the gap between Underground Resistance and what you took Black Music to be, between

listening to Miles & Macero's *He Loved Him Madly* and crossing all thresholds with and through it, leaving every old belief system: rock, jazz, soul, Electro, HipHop, House, Acid, Drum'n'Bass, electronics, Techno and dub – forever.

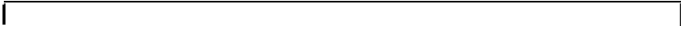
The mayday signal of Black Atlantic Futurism is unrecognizability, as either Black or Music. Sonic Futurism doesn't locate you in tradition; instead it dislocates you from origins. It uproots you by inducing a gulf crisis, a perceptual daze rendering today's sonic discontinuum immediately audible.

The Futurist producer can *not* be trusted with music's heritage. Realizing this, UK and US dance media spring forward, to maintain these traditions the producer always abandons. Media's role is to defend an *essence*, by warding off all possible infections: journalists become missionaries on behalf of HipHop; they battle for the soul of Techno.

Which is why at Century's End you tune into sensory frequencies undetectable to the happy tinnitus of good solid journalism. You are willingly mutated by intimate machines, abducted by audio into the populations of your bodies. Sound machines throw you onto the shores of the skin you're in. The hypersensual cyborg experiences herself as a galaxy of audiotactile sensations.

You are not censors but sensors, not aesthetes but kinaesthetes. You are sensationalists. You are the newest mutants incubated in womb-speakers. Your mother, your first sound. The bedroom, the party, the dancefloor, the rave: these are the labs where the 21st C nervous systems assemble themselves, the matrices of the Futurhythmachinic Discontinuum. The future is a much better guide to the present than the past. Be prepared, be ready to trade everything you know about the history of music for a single glimpse of its future.

00[000]



SAMPLADELIA OF THE BREAKBEAT

Intensify the Phonotron: Ultramagnetic MCs

In '88, with Ultramagnetic MCs' debut album *Critical Beatdown*, HipHop becomes computer music. Ultramagnetic MCs – producer-rapper Ced Gee, rapper TR Love, dj Moe Love, concepttechnician and vocalist Kool Keith – initiate a cosmogeny of sampladelia, a mythology of the sampler. Tracks become Sonic Fictions, sonar systems through which audioships travels at the speed of thought. Ultramagnetic MCs are obsessed with the field of force that technology ignites in us, with the unstable world of cosmophononic forces released by the sampler, the electromagnetic waveforms accessed through sampladelic operations.

The human organism is flying apart. The Song is in ruins. Sampling has cracked the language into phonemes. It breaks the morpheme into rhythmolecules. Only science can ride the shockwaves it has instigated. On *Brainiac*, the Ultramagnetic producer becomes the Breakbeat Scientist, 'building molecules on my SP12.'

We're opening the magnetic field
Ultramagnetic MCs

The Fallout from Phonemes

MCs' *Ultra (Part II)* announces the Ultramagnetic world of molecularrhythm. Sampladelia splits syntax into phonoparticles. It releases verbivoco objectiles, consonants which fire at 45 revolutions per minute until 'the auditory canals are burning, while the Technics keeps turning, at a dominant speed.' Kool Keith's insistent stress on final and first words frustrates the flow, turning delivery into a zigzag of staccatoing syntax that functions by 'elevating a physical source through particles'.

The Magnetic Mutation of the MC

The Ultras sample is a door opening onto kids playing far off, pianos looping until notes lose profile, dissolve into a timbral tension without release, *Star Trek* theme pulsations synthesizing the human into a SonoCyborg. Morphemic radiation mutates the MC, granting new powers of 'ultrapower flowing'. All these elements of the sampladelic world coalesce in an Ultramagnetic forcefield, converging until they 'roughly emerge as a soul mechanism.'

The Hypoatomic Universe

Hypoatomic energy irradiates the Song with soul sonic force, adapting the scientist into a *soul mecha*. Entering the phonophysical universe shatters scatters the mind. In *Smoking Dust*, 'inhabitants disappear through' Kool Keith's brain, provoking a psychic blast that leaves him wondering 'What seems to be the problem, What's wrong with my mind?' The Psyborg is swallowed up by the kinetic energy which creates it, overcome by 'wires leaking with energy'. Hospitalized at Bellevue, Kool Keith uses HipHop to organize his 'delirious insane' condition, assembling a PhonoFiction of concrete irrationality. The *Ultra* track amplifies this shockwave, broadcasts it in mad squealing synths – radioactive drones switching into crackles.

I Is a Crowd

Instead of putting the scientific self back together or mending the broken fragments of the cybernetic psyche, Kool Keith heightens what used to be called schizophrenia, intensifies the crackup and the breakdown. The self doesn't split up or multiply into heteronyms.

Rather, the self no longer amputates itself down to a single part but instead asserts that I is a crowd, that the human is a population of processes. Multiple personality is no syndrome or disorder but a relaxation, a giving into rather than a fighting against the brain as a *society* of mind.

The brain is a society of mind with no one driving. The head isn't the Kommand Kontrol Centre of the body. There is no one processing agency, intelligence isn't central and everyone hears voices talking in their heads all the time. Kool Keith's various heteronyms – Rhythm X, Funk Igniter Plus, X-Calibur – are agents, systematically fictionalized from the flux that we all float in. What used to be called alteregos are now *multi-egos*, a crowd of synthetic subjects.

HipHop Is an Analogy Engine

HipHop begins as an analogy engine, in which the I is like = like = etc. This phonoextension is why HipHop takes over space in your head. Powered by analogical chains, its syntactic prosthetics occupy your brain, take up your mind.

For Kool Keith, words are machineparts, to be soldered together into Unknown Audio Objects. Roaming over the wreckage of songs, the scientist assembles PhonoFictional engines from 'hypothetical basic mechanisms'.

In *MCs' Ultra [Part II]*, the phonoengine functions 'like a Commodore computer' by 'inducing meaning to its limit.' *Ain't It Good to You* diagrams the hydraulics of the Ultra sonomachine in its hazardous journey across the head. Phonopower flow(er)s through the neurocircuits along 'rhymes in my tank', through 'brains pumping gasoline', igniting the 'meter and gauges' that crank out new 'lyrical engines'. The Ultramagnetic lyrical engine operates by 'combinating elements', connecting a suffix to a prefix, using these machineparts of 'vocab' to 'connect the abulary', then 'switch it'.

The cosmophononic engine is driven by neologisms, by terms like *Critical Beatdown's* 'exquisite', which joins exquisite to inquisitive. *Brainiac's* syntactic -abulary machine sparks new synaptic junctions, new pathways for 'fuel' to 'ignite blood pressure above the brain level.'

The archetypal Ultramagnetic MC track has a spaceship drone running through it, the radioactive hum of a powerdrive which transports you onto the flightdeck of the *Nostromo*. *Bring It Down to Earth* typically switches tempo, like power being thrown so that the

beats cross a threshold and the sample snaps open onto a new world. The impact of new atmosphere rushing in decompresses the track, inserting you into the hull of the ship, until 'power ignites the four horsemen.'

On '93's *We Are the Horsemen*, the spaceship's powersource hums throughout, buried at the edge of earshot so it turns audio-tactile: your skin hears and your ears feel it as a perpetual irradiation, a tense present without release. Peering out from the flight deck, Kool Keith pilots the soundcraft, monitoring alphanumeric settings at 'Artemis Level 4', checking that 'I get a warp speed, change my gamma flow, 1387, 20096.' His petulant, disdainful cadence shifts gears, seats you beside him, turns you into co-pilot locked into his 'mentally mad' trajectory, unable to grab the controls. Reentering earth's orbit, the UMC sonar ship prepares to dock at 'gamma ray one block, altitude X speed.' Keith doesn't address you: his lyrics are readouts from a bank of onscreen terminals. Their preoccupied urgency alter your position, switching you from co-pilot to Ground Control to a viewer watching 'the movie' where 'your brain will be the star'.

On *Smoking Dust*, synths shift gear, phasing the track onwards in a propulsive surge at '7 x zero, coming light speed, Alpha control spark, relay the A jack.'

I'll take your brain to another dimension

I'll take your brain to another dimension

PAY

CLOSE

ATTENTION

Kool Keith <> The Prodigy

Advancing Technical: Take the Elevator to Level 7

Ultra-style science doesn't clarify: instead it perplexes, complexifies. The Ultra theorist's role is to 'truly confuse as a scientist,' by 'advancing technical, by confounding through Rakim's formula of 'constant elevation'. To advance technical is to reconfigure the concepttechnics of HipHop, to invent new sonic operations, new phonotrons. Elevation is Hip Hop's higher state of consciousness. Ultra's techniques of elevation tap into the alpha, beta, gamma, hypogalactic rays which are tearing us apart. Rays = raze = raise: through homophonic processes the scientist harnesses the radiation flowing through him.

Autobots and Cybotrons

By advancing technical, HipHop complexifies itself, 'charging energy at a level', becoming an intensified phonotron powered by ultramagnetic current. In *Brainiac*, this power is harnessed into new cyborg systems which function by 'boosting crystalloids as an autobot, increasing brain limits far beyond space.' The autobot is the automatic robot, the dumb out-of-control pathfinder which explores viral zones, nuked-out wastelands, intestinal canals and the pavilions of Jupiter. It allows new weapon systems, such as the 'cybotron, completely on a mission to annihilate.'

HipHop's sonic cyborg electrocutes, while Electro's Cybotron technofies the biosphere. The Ultra cybotron is the triggering mechanism for the exhilaration of annihilation: 'Megabomb ignite.'

Assemble the Cryptogrammatron: Rammellzee

Malu Halaza: What is an engineer and specialist on quantum physics doing in rap?

Rammellzee: I'm a very social creature

Science Puts out the Sun

To drop science is to mystify, rather than to educate. In HipHop, science breaks it down in order to complexify not to clarify. For auditionaries such as Rammellzee, Rakim, The RZA and Killah Priest, science is the end of edutainment and the systematic mythification of everyday life. Instead of teaching street knowledge, science steals 'your common and robs your sense', as Wu Tang Clan proteges Sunz of Man describe it. Rather than giving you the real deal or clearing away centuries of miseducation, science exacerbates the fog of the mind and heightens the hermetic. Its drive is to expand the limits of Virilio's unknown: 'Science and technology develop the unknown, not knowledge. Science develops what is not rational. That's what fiction is.'

Science actively derealizes the solid ground of the street, corrodes the rare essence of soul, sucks you in through the studio until you're slipping through the pavement into inner space. Science actively cloaks everything, just like Sun Ra, who always veils his answers: '*Astro Black* is about – oh, something that's greater than the truth. So it's over in myth

it's hidden.' Science is to HipHop as MythScience is to Sun Ra. Science unravels the world into endless allegories, eclipsing consensual order in an overwhelming opacity of overlapping directives.

Science doesn't instruct, it inducts you into secret states of innervision, initiates useless quests for the 3rd Eye, spreads a daze of confusion only occluded by the powers of the Inner Mind's Eye. Science turns vinyl into a mass medium for channelling information mysteries, private MythSystems, fragments from endless infoverses. Science takes advantage of vinyl's replayability by turning listening into a full-time job. Science wants you for an acolyte, wants to initiate you into a hermeneutics which elides reality.

Science Razes Consciousness

Science razes consciousness: Rammellzee, Killah Priest are esoterrorists who use the 12 to drop mythillogical systems that actively terrorize. To terrorize is to territorialize. Terror razes consciousness by destroying the old grooves of the head. The decks become what Lee Perry terms the 'Turntable-Terranova'. A New Earth emerges from the new grooves of the newly scored mind. Over the cosmo-dynamics and proto-jungle breaks of '87's *Follow the Leader Dub*, Rakim issues a grave diktat: 'I'm here to remake the brains, take away the pain.' Science scorches the old brain to manufacture a new mind.

Graffiti is not vandalism but a very beautiful crime

Bando

Graffiti Is a Future-Writing Machine

After sur-realizing slanguage into the twilight kingdom of double-dutch remanipulation on the *Beat Bop* 12, Rammellzee begins to analyse the formal implications of HipHop, and immediately realizes that Graffiti constitutes a future-writing machine: 'Graffiti is a word that society placed on abstract technique, iconic statement. People did not understand.'

Fab 5 Freddy redefines Graffiti as Calligraffiti, just one name among many: Iconografix, Aeroglyphics and Aerosoul Art all presume an extensive training in exclusive symbol systems. Aeroglyphics is maintained by an electribe of youths bonded together through skills, cabalized by the technics of vision.

Wildstyle returns communication to priestly elites who transmit baffling codes throughout the city. Fab 5 Freddy stresses that 'Wildstyle is totally illegible unless you're initiated.' The city walls turn into secret channels. The city trains become galleries without walls for the cyphertribes.

The pictogram involves the senses in McLuhan's 'ballet of postures of the mind.' Wildstyle exercises the senses, puts the eyes and ears through an Escherized assault course. For Bando, the letter opens up a new possibility space: 'I make letters because 26 letters is enough to define every single thing that exists in this world.'

The Formal Operations of HipHop

Wildstyle is just one element in a HipHop now understood as a series of techniques, an ecology of media which together constitutes a kinaesthetic WarMachine. HipHop has hitherto been understood naively in terms of its content, of what software engineers call the front end of message, lyrics, output. In the *Ikonoklast Panzerism Manifesto*, Rammellzee crosses a new threshold of machine evolution by elaborating the formal logic of HipHop, its back end, its abstract operations: 'You have the gladiators, the freestyle dancers, warring on the ground, you have the graffiti writers warring in the air or in space. You have the translators, the DJs, the MCs. The DJs make the sounds of the piston inside the graffiti element or the tank.'

For Rammellzee, graffiti is tomorrow's writing machine – 'the graffiti element or the tank' – which can enter into the centuries-old war of armoured sign-systems. The dj is the phonomotor: 'Their sound is the perfect tuning of the engines, the engines in the tank that go bambambam. That is beat culture.' The *Ikonoklast Panzerism Manifesto* opens up the concepttechnics of HipHop. To open up a concepttechnics is to elaborate the conceptual technology of a new sound, the abstract machine which drives a new Machine Music. Expertise is encoded on the microchip. Virtuosity has migrated to the soundmachines which contain all music as presets, soundcards and soundfiles. Black Music is in the machines. Therefore an approach to the machine and to machinethought obsolesces premachinic identity. Every sampler and every software sequencing package is 'a constellation of systems and subsystems' through which the producer navigates. A possibility space therefore emerges from restriction, the mother of invention in Holger Czukay's equation. Concepttechnics fluctuates between constraint as a function of

the instrument's potential and as a function of the producer's mind.

Militarizing Beat Culture

Abstracting HipHop into a series of formal operations is the first stage in Rammellzee's militarization of beat culture. His aim is to turn the abstract machine into a conceptual WarMachine. This is why he describes himself not as a producer or an MC but as 'a mathematician and an engineer' who 'builds weapons for a living.'

Magico-mathematics and concept engineering converge in the encryption system of Wildstyle. From this emerges *Ikonoklast Panzerism*, the armoured typographical machine, the cryptogrammatron used in the communication wars of the future. *Panzerism* leaves the walls of the world behind to become an encryptic technics in a universe of secret myth-systems.

Writing, alphabets, typographies are all ubiquitous elite technologies that have lowered themselves into your consciousness where they adapt you to *their* habit, *their* reflex, *their* perception. The alphabet is not just a transparent communication but a ubiquitous technology, a system adapted and encrypted by successive religious regimes for warfare: the Roman, the Christian, the Medieval, the Gothic. Words, letters, signs, symbols are all weapons, stolen, ornamented and wrongly titled to hide and manipulate their meaning.

The prize? Control of the means of perception: 'The Romans stole the alphabeta system from the Greeks through war. Then in medieval times, monks ornamented letters to hide their meaning from the people. Now, the letter is armoured against further manipulation.'

Rammellzee's war takes place on this front: the barely perceptible level of habit and reflex. Each subsidence, each decompression into ubiquity is a victory for one technology over another in a perpetual war between adaptive technologies fought on your own sensorium.

Panzerism is a mystery weaponsystem in a secret war not against future corporations but against shadowy Christian cabals: *Ikonoklast* 'means symbol destroyer, it's a very, very high word militarily, because the two Ks are the only two letters that can assassinate the infinity sign, remove the X.'

The MythScience of Beat Culture

By elaborating the abstract machine of HipHop, Rammellzee opens up the MythScience of beat culture, which becomes a mythenengineering of symbolic information.

'87's awesomely crepuscular track *The Lecture* opens up the Military Perceptual Complex of MythScience. Rammellzee is no longer a Master of Ceremonies, an MC. Instead he's an MK₃, a Master of Kommand Kontrol Kommunikatons, a despotic esoterrorist who lectures on 'Aerodynamics and Quantum physics'. Instead of breaking down information to its simplest atoms, the tunnel visionary systematically encrypts all information: 'But we want you to understand that the integer is a nation by itself. Its function [pause] leads you into the future.'

Mathemagical Weapon Systems

Panzerism is heavier than the Pentagon. Inside the Military Perceptual Complex, the integer is the magico-mathematic weapon for use in cyberneticist Norbert Wiener's scientific wars of the future. Drawing you into an auditorium where echoes seat your hearing at the back, Rammellzee's voice arrives from a distant lectern, inducing a powerful sense of being drawn into overlapping systems of privy information: 'All formation and military function that hold the code to any formation procedure. With. Out it you have no control. You will have no control. This information I cannot really give you. Because I am not the master of its own technique.'

Throughout, the tone of the lecture shifts treacherously from acerbic to drawling to disquieting: 'As the [pause] interrogator of *Ikonoklast Panzerism* I don't give nobody no business. I tell you what is full military information and function for all integers, all four of them. There are no pictograms here. What I draw is architecturally built and will fly.'

Information and function: as a cryptogrammatology, *Ikonoklast Panzerism* encrypts all symbols, inducing an overpowering sense of ominous information and conspiracy made audible in *Lecture's* keening, multitracked voices. Horns loom into tonal shadows, shattered by string arrangements that reverse into Varèsian shriekbacks which leave space shuddering from the concerted attack impulse.

The cryptogrammatron cracks alphabets and breaks down equations. It works as a codebreaker and symbol destroyer in the ongoing perceptual wars: 'In a war against symbols which have been wrongly titled, only the letter can fight. The infinity sign with the fusion symbol

[x] in its middle has been wrongly titled Christian [+] and thus it has to be assassinated or the x has to be removed.'

The letter is a signal system designed for armoured combat in the sign wars. Across the unstable front of the typographic warzone, Rammellzee assassinates the fusion symbol sign, and removes the x using the integer and the letter. This is rapper Jeru the Damajaa's *Wrath of the Math*, where symbols are mathemagic numbers imbued with lethal capabilities. Rammellzee: 'The infinity sign is a mathematical, scientific, military symbol. It is the highest symbol that we have and you know there isn't even a key on the typewriter for it. I'm going to finish the war. I'm going to assassinate the infinity sign.'

Equation = Annihilation

In his drive to capture all levels of the analogical, Rammellzee crosses into the covert ops of clandestine perception. Symbols are Commands which encode power: 'The 4 integers, nocturnal myth, music notes, meteorological symbols of heterosizers and all integers that formate any process of reading pictogram knowledge [*pause*] and of course my invention of the atomic note [*pause*] for *Panzerism*.' This abstraction of HipHop's formal architecture and the convergence of its kinaesthetic operations leads Rammellzee to invent a militarized mathematics. In the war of symbolic systems, the equation is annihilation. Norbert Wiener looks up from his flow charts to announce that 'The effective mathematician is really as dangerous as a potential armourer of the new scientific war of the future.' In mathemagics, equations are the operating instructions for unknown authoring engines.

On Don Brautigan's back sleeve for James Brown's '73 *The Payback*, *Mind Power* is illustrated by a profile of a man recessed into grey, pyramidal stone. His cortex is divided into sections, each inscribed with archetypal equations: $E = MC^2$. Mind glows with the light of mental power, astralized by magico-mathematics.

Brown analogizes vinyl's groove to funk's groove. By abstracting material and Applied Rhythmic Technology at the same material plane, he opens the concepttechnics of funk. The revolutions of *Mind Power* on the decks flexes the muscles of the mind. Each revolution of funk's groove rescues the mind until it becomes a superpower. The JB drills the audience into its new nervous system, until you become the souljah in an army imbued with Soul Power.

Equations – postures of the mind – converge with post-John Lily

cybernetic bioprogramming on how to tap into the mind's powers, how to bodybuild the brain. Funk turns into a subjectivity engine, into what Detroit's Techno dj-imaginer Electrifying Mojo will in '93 call the 'Mental Machine'.

The MythScience of the Scratch

The Lecture probes into the unexplored possibility space of skratchadelia. The perceptual pressure of the new artform forces Rammellzee forward into a MythScience of the scratch, the Darkside of the decks, the hermeticism of the headphones, the trigonometry of the transformer switch: 'You must talk to the dj. You must. Talk. To. The dj. The scratch is not for you. The scratch [pause] is not for me. But you must listen to it anyway. Education is only subliminal. Redefine. Redefine.'

Breaking the beat doesn't always reduce it to the atoms of Ultramagnetic MCs' machine mythology. For Rammellzee the beat is already an encoded rhythm, and to break it down only encrypts it further. The scratch is vinyl made recognizable yet unlocatable. Only by comparison can you approach the scratch. Its new tone leads you on an analogical flightpath. Just because it's pop doesn't make it easy.

On the contrary, the science of the scratch is massively difficult, demanding intense rehearsal. Far from being something anyone can do, scratching is intimidatingly elitist, an artform heard by all but only understood by the obliterated. As it currently exists, 20th C art can barely grasp the tonal history of turntabilization.

In exploring the formal implications of the scratch, Rammellzee in '87 can therefore presuppose a global audience of 100 at the most. Strings are arranged into shrieking attacks that halt abruptly, leaving space trembling with shock impact like an EEG pulse gone critical: 'Only he has the number written down in the scratch. Intellectualize. Redefine. Because it's only in the dj's manuscript. And it's no spoken word. It's called a scratch. With all the millions and millions of megabeats that have been programmed in our minds, we know it all equals down to zero zero zero active negatives.'

A female chorus keens mournfully. A ship horn blasts as it approaches harbour: 'You hold the scratch being a broken record. This wine turns to twine. Entwines like a rope in your mind/Like DNA code.'

The MythScience of the scratch is just one element of the traumatizing system of Gothic Futurism: 'You have just gotten a chill in the feeling of your heart. [*Foreboding echo*] With most people their heart

would have stopped. But I think yours [*speeded-up vocoder*] just got started. I held all this information back from you just because you haven't signed your name to your death certificate.' Shards of funereal ghost choir break in, the jagged edges of broken harmony.

Gothic Futurism fastforwards the ancient Gothic-Germanic script suppressed by Roman typography. Rammellzee becomes the Historetician, the historical theoretician who terrifies through his esoterical terrorism. Factory rhythms engulf the lecture. A bottle smashes, becomes the beat, pistons punch out time, hammers jack and judder, steam shoots needles of hissing air. Strings swarm in an impending unease, a state of unlocatable threat. Forlorn voices wail in a threnody for deleted massacres.

Lecture is structured as a series of inscrutable commands from a Destructiv Knowledge Engine: 'We want you to proceed with your books on Gothic texts. We want you to open up the pages 449 45 Roman Law. Turn to card number 1997. And for this we want you to know that you have already failed your course with a B. You haven't even gotten to what it is. The inflammation of all information.'

Escape into Psychopathogenetics: Dr Octagon

*Sometimes I don't even feel like I am a human
being anymore*

Kool Keith

ReEntering Planet 3

On hearing *Dr Octagon*, HipHop's protectionism, its appetite for grounding reality, its drive to discipline and punish are obsolesced. All its belief systems are demilitarized, vaporised on contact, leaving you stranded in a psychopathogenetic future with no way of getting back to the present. Kool Keith and his heteronyms are always coming *back* to Earth, perpetually reentering Planet 3's orbit. They're already at home with offworld states; it's the Earth planet and it's Earth people – you! – who are the aliens to them.

Nothing is alien to Dr Octagon because everything is alien. 'Space is my planet' he reports, in a *Leave it to Beaver*-voice: 'I live there, eat

there, wash there.' This generates the same relief & thrill you feel when Tricky quotes Japan's '81 *Ghosts* on '94's *Aftermath*. Far from pretending white Americans don't exist, Dr Octagon producer Dan Nakemura – known as The Automator – opens up a memorybank of 50s White-Man sci-fi movies.

Astonish Me!

The Automator perpetually folds the mind into origami. Listening to The Automator reminds you that HipHop is computer music. Trad HipHop continues to install a painful binary machine, a rigid funk canon that cuts right through you, and polarizes your flux. But after Kool Keith's, The Automator's and guest producer Kut Master Kurt's '95 album *Dr Octagon*, this restricted aesthetic feels like emotional amputation, like terminal insularity elevated to a fraudulent ethics, an ethics known as Black Music.

Which is why the term Black Music so often sounds stupid, so dated and pointless, a phrase only used by the most retarded r&b cheerleaders. Black Music: the term clamps the brain because it omits the role of the machine, because it blithely ignores computerization by locating all of HipHop back in the all-too-human zones of the soul or the street.

To use the phrase Black Music is to presume a consensus that has never existed, to assume a readily audible pre-synthetic essence which machines have externalized, manufactured and globalized. No longer sheltering within an essence that never was, today's Futurist understands the mythillogic of the soundmachine.

The Futurist is a scientist who manufactures new MythSciences from soundmachines: the processes of AutoCreation, AutoCatalysis, AutoDestruction which cooperate as the secret life of machines, the clash of concepts on the plane of X meets Y.

I Multiplied

The traditional diagnosis of alienation no longer makes any sense to the 90s producer. Instead of synchronizing the mediated body with self image until the 2 make a single knowledge of self, Dr Octagon disaligns the selves and then continues to multiply them in a mitosis of the I.

You Are a Population

It was already clear to Rimbaud back in the 19th C that I is another. To listen to Dr Octagon today is to grasp that every I is a crowd, that you are a population, that unity is a fleeting, accidental convergence persistently mistaken for an identity.

The unified self is an amputated self. The human is an ecology of mind through which the Doctor walks, hacking and slicing pathways through the distributed brain. He is the offworld xenobiologist, fascinated by the biodiversity of the human organism: 'I study and inspect people. Choosing scientific matter, I probe for evidence.' He's attracted to the human's connective zones, your buttcracks, vaginas, mouths, sphincters, magnetised to the human as a mammal in an animal continuum. Octagon is always plugging humans into animals, reconfiguring bodily hierarchies, recombining them with cartoons. The human species is his zooillogical laboratory, Dr Moreau, Dr Benway, Dr Octopus and Dr Kervorkian his inputs. Instead of getting himself together, he falls apart and the parts – Dr Octagon, Kool Keith, Ultramagnetic MCs – battle one another. Thus Kool Keith on his Dr Octagon persona: 'When he says "I'll battle Ultramagnetic and myself as well," he definitely means that.' Not schizophrenia, nor quadrophrenia, but octophrenia.

***The forms of thought assisted by computer
are mutant
Felix Guattari***

Technofy HipHop: Build the Unidentified Audio-Object

Kool Keith defines 'elevation' as 'new terms above the natural language of MCs'. To elevate means to reinvent the concepttechnics of HipHop, its conceptual technology. It means technofying HipHop, in a parallel to Cybotron's '85 demand to technofy the biosphere. To 'advance technical' is to perpetually engineer HipHop into Unidentifiable Audio-Objects, UAOs that hurl listeners against the reef of their senses.

The UAO is a Year-3000 connection machine that runs on cosmophononic power, a Jupiter-to-Earth link enabling the alien to 'program one and go to Earth through the fax machines, My number 709-755-6EL3, Computer file 9-3, Digital level.'

As computer music, the UAO has an internal computer architecture

which digitizes funk's groovengine: 'I'll take a break like James Brown to the bridge,' the section which turns the Song inside out. HipHop is degravitated, becoming not only weightless but invasively PhonoFictional, aggressively competing with the consensus of your head, forcibly substituting your assumptions with its own.

HipHop is transchronized. The entire *Dr Octagon* triple concept album returns to '96 from the Year 4000, from the 40th C: 'It's like if you were running around in the year 4000 and this tape is playing.' *Dr Octagon* snatches you into the world *it* comes from, an environment which you're at home in. The record turns you into a 40th C human. It jumps you into a world in which it's on. Consequences are either infinite recursion [this tape is playing and on this tape is a tape of...] or complete indifference: you were running around, you never even heard *Dr Octagon*.

The album is an octagonal time machine, a future UAO shooting past '96 back to '87 to duel with his albums, to take on his former identity, his former group: 'Dr Octagon was designed for the specific function of returning from the future. He would love a crack at *Critical Beatdown*.' The Ultramagnetic spaceship becomes the Octagonal time machine.

Haloes were found at the landing site.

Sir Menelik

2 Mirrors in the Clear

John Carpenterized synths freeze time into the hovering tone of the medico-conspiracy thriller. *Earth People* uses rhythm synthesizers for their indifference, their tinny treble: 'I see it as futuristic new wave rock. It's metal in its own way. It's meant to have that industrial effect to it but slowed down.'

Information stress lights up the sensorium like the Nippon Trade Centre. Kool Keith replaces HipHop's Trad voice armour with a highly strung hauteur, an extreme sarcasm pointed with malicious precision at Trad HipHop's sanctified stupidities, an extreme aversion to its familiar fixations.

Morality Is a Muscle, Clenched

Morals are just these sensory coagulations, these tensions knotted and bunched across the skin of your beliefs. *Dr Octagon* inverts the Trad

hierarchy of head/stomach so that your head tastes ill and your intestines think. Your brain throbs, in peristaltic waves. *Dr Octagon* keeps everything unreal, its voice in perpetual motion, from glutinous to gloating to dastardly to bedside to malicious. Instead of grounding you it uprootes you, pulling you across into its world, moulding then massaging you across a series of thresholds you never knew existed.

Design for a Brain

In Octagonal sound design, the music suddenly drops out, like ballast jettisoned, so that each WordObject becomes an objectile projected through space. Voice echoes the first word of each sentence: 'Vanishing victims kept alive on metal examining tables. Experts, baffled at the survival from exposure to laser scalpels, Green berets growing coneheads in mechanical wombs.'

When the music evacuates, the chorus-sample zooms past earshot: 'Megatron!' 'Rejuvenate!' 'Galaxy Rays Powerful!'

By being projected all at once, the chorus compacts into a syntax beam, packed with kinetic energy, a supersonic allatonceness: 'Controlled by gammalights!' Magnified voice blasts off across sampladelic space with an intensified phonodrive. *Earth People* is filled with the plosive impact of polysyllables which pushes against the bass and the beats, tugs at them, pulls towards and away from them, acting as a field of attraction for the groovengine. Consonants are charged until syntax detonates, in a series of off-the-beat exPLOsions: 'Octagon, oxygen, illuminum, intoxicants.'

In the parallax world of *Technical Difficulties*, where *Dr Octagon* goes 'walking through a polygon', rhythm falls away and sentence looms forward: the ear hears it as a headline. 'My first impression was to give patients a lesson, who's the best to put me to the test, I'll battle Ultramagnetic, myownselfaswell.'

Simultaneously a robotvoice repeats it slowed down, like a radio tuned into a phone-in generating delay feedback. This 2nd voice repeats the last words of a sentence, drawling, sneering, slowed down or distant like a faulty echo chamber sending back aural distortions.

Octophrenia frustrates flow. *Dr Octagon*, Sir Menelik the Emperor General, all accent unexpected words and stress syllables so that WordObjects disarticulate themselves. Flow falls apart in a drastic dysphasia when the brain's unable to coordinate syntax. By arresting HipHop's verbose flowmotion, syntax seizes up then lurches forward in a

robotic cadence that induces an arrhythmic irritation. Mindstresser: the order of things breaks up. Sense starts zigzagging like the lightning logo bolting across Captain Marvel's costume.

By missing out the 'and', octagonal consciousness collapses the distance between WordObjects, creating a dataflow of different matters, a discontinuum of all kinds of minds. It updates the info overload of Joycean stream of consciousness, the unperiodic continuities of Reed and Burroughs. Octophrenia is both datastream and flow frustration, connective synthesis and disjunction.

Octagonal Consciousness

These techniques converge until Trad stream-of-consciousness – that modernist byproduct of radio – crosses another threshold into parallel processing, the emergence from massively connected computer programming. The Song is rebuilt, out of excerpts from 8 unrelated broadcasts happening simultaneously.

At Century's Start, W. E. B. DuBois analysed double consciousness as 'this sense of always looking at one's self through the eyes of others'. Mutation by high-pressure capitalism collapses psychic and social membranes, doubling and splitting you into the 2nd person. At Century's End, Kool Keith protege and digital-age lyricist Sir Menelik exemplifies octagonal consciousness in the Information era. Adaptation to the Information-Image economy multiplies the senses of seeing, hearing, feeling yourselves into the 8th person. *On Production* is neither song nor track, more an extremely compressed lecture delivered in a merciless monotone and so insistently by Sir Menelik – the Emperor General – that it induces information panic, updating Rammellzee's and Shock Dell's '87 *The Lecture*. *The Lecture* is esoterrorist science: hermetic, despotic, terrorizing. With Sir Menelik, science travels at the speed of thought, phaseshifting into a Disunified Field Theory. The MC becomes a Human Computer, a parallel processor who hears talking in everyone's mind.

What of the others, the humans with their almost non-existent tolerance for pain and their totally inadequate mental discipline?

Sir Menelik

The MC Is a Parallel Processor

At this level of mindstress, syntax becomes a rapattack which strobos the brain, impacting with the remorseless frequency of measured voltage. As attention drags further behind the inexorable information flow, the gap between attention lag and inovelocity is phaseshifted, passing from sensations of stupidity into an itch in the brain.

On Production triggers an acutely tactile mental irritation that simultaneously begins crawling over the skin. Your brain feels fat and flabby, a torpid muscle dragging its bulk after this rap that just won't stop.

This is not science fiction but New Science, functioning from the year 4001, from 'the time when the human brain has reached the era of full employment.' Chris Marker's film *Sans soleil* announces this era, when 'everything works to perfection, all that we allow to slumber, including memory. Logical consequence: total recall is memory anaesthetized. After so many stories of men who had lost their memory, here is the story of one who has lost forgetting.'

On Production shifts from a report from the flightdeck to instructions from a navigation manual, to report of immune system breakdown, to emergency broadcast, to a lecture on chaos theory from a future version of the Santa Fe Institute: 'Does science achieve a unified theory of complex systems? Completely chaotic systems, such as turbulent fluids, heated gases appear on the borders between rigid order and poetry among a list of the 31 ways to define "nomadical".' Sir Menelik switches address again, broadcasting a warning that turns you into an echochamber: 'All mankind must submit to genetic testing, Disease contaminates every transmission of unawareness.' Terror resounds through the dome of your head.

As Sir Menelik the Emperor General emerges from *No Awareness*, the synth's dying arc and electric piano drop away, leaving an ominous texturedrift, a vapourmoan. Drum machine stilts, its inexpressive pulses stutter. WordObjects *whaaAAm* across the stereoperceptual field. Sir Menelik leaves sequential monorational flow for a new mode of rationality. Not verbal flow but rather a parallel-systems maintenance check, a specifications warning report read out really fast, to induce

infoverload of 'Acoustic death by analysis.'

Which generates a disconnected multirational Sonic Fiction, in which concepts jump, thought leapfrogs, mind zigzags from clause to clause, a perceptual current transmits between each intervals, ripples across gaps. Concepts are electrified into pararational military instructions to 'increase magnetic fields, Electro-liquid expands, critical procedures cool 77 Kelvins by submerging.'

Each track induces a feeling of perpetual dysphoria, untying and rearranging your nerves, dis-ease triggered by sampladelia before the lyrics ever start. This verbal verbosity, this info-expansion turns you into a decoder perpetually switching routes between Marvel cosmology and cosmetic surgery, transpecies organ transplantation and astrophysics, alien sex and medicopathology.

We think as instruments

Mixmaster Mike

The Deck Magus Turns the Tables on Time

Turntablist Q Bert's skratshadelic solos are the sonic parallel of the sf/horror transformation scene. Already effected sounds become unrecognizable textureffects, spongy blocs phaseshifting through a series of unknown audio states. Squeals modulate into whistles and screeches, decay into astonishingly sustained whinny which reverts briefly back into a recognizably male scream before fading out entirely.

Skratchadelia is mutanttexture generated by turntabilization, by using the turntables as universal tone generators. Disk of turntable ensemble Invisibl Skratch Picklz: 'It's the only instrument that can be any instrument. When you have a guitar, you're limited to how the guitar sounds. But when you have a turntable, you can take a guitar, you can take a drum sound, you can take a dog barking, you can take any sound and manipulate it into your own.'

Q Bert hooks the decks up to guitar-pedals, drastically effecting skratshadelic textures, immediately opening up an entirely new spectrum of altered beats and mutanttextures.

ASSEMBLING THE CONNECTION MACHINE

Note:

Books sampled are cited by author and date, and listed in *DataMining the Inverse*. Records, sleeves, posters and other artworks are cited by artist and date and listed at the end of each chapter-section.

Track titles, where relevant, are listed thus, "Ultramagnetic MCs: *Brainiac; Smoking Dust* from *The Basement Tapes*, Tuff City Records, 1996", and named in brackets after the citation when helpful: e.g. "'combinating elements', Ultramagnetic MCs, 1996 (*Brainiac*)".

Films are cited by title and listed alphabetically at the end of each chapter section, as video releases ("NCA" = "not currently available on video release").

Magazine citations are given in full the first time, then subsequently by artist, author and date, thus: "Tricky in Gavin Martin, *NME*, 28 Oct 1995" subsequently becomes "Tricky, Martin, Oct 1995".

[-015] 'Its mission is...'. *On the Uses and Disadvantages of History for Life* from Nietzsche, 1983, p121

Thoughtware: Operating System for the Redesign of Sonic Reality

[-006] 'the rhizomorphic, fractal structure of the transcultural, international formation that I call the Black Atlantic,' Gilroy, 1993, p4

[-004] 'MythScience', from track title *The Myth-Science Approach*, Sun Ra, 1970; 'Science and technology...', Virilio, 1983a, p62

[-002] 'talks very happily...', Sadie Plant, Matthew Fuller, *Alien Underground Version 0.1*, Spring 1995; 'antiplague', Reed, 1978, p6

· Sun Ra: *The Myth-Science Approach* from *It's After the End of the World*, MPS, 1970

- 3D/Robert Del Naja, Sleeve Art to *Headz 2*, Mo Wax, 1996
- The Winstons: *Amen Brother* from *Ultimate Breaks and Beats, Volume 2*, Street Beat Records, 1986
- *Flash Gordon*, Michael Hodges, 1980, BMG Video

Thoughtware: Sampladelia of the Breakbeat

- [025] 'building molecules on...', Ultramagnetic MCs, 1996
- [026] 'We're opening the magnetic field', Critical Beatdown, 1987; 'the auditory canals are...', Ultramagnetic MCs, 1987; 'elevating a physical...', *ibid*; 'ultrapower flowing', Four Horsemen of the Apocalypse, 1993; 'All elements converge...', Ultramagnetic MCs, 1996; 'inhabitants disappear through...', Ultramagnetic MCs, 1996 (*Smoking Dust*); 'wires leaking with...', Four Horsemen of the Apocalypse, 1993 (*Bring it*)
- [027] 'hypothetical basic mechanisms', Ultramagnetic MCs, 1987; 'like a Commodore...', *ibid*; 'rhymes in my...', Critical Beatdown, 1987 (*Ain't it*); 'combinating elements', Ultramagnetic MCs, 1996 (*Brainiac*); 'On vocab, connect...', Critical Beatdown, 1987 (*When I Burn*); 'fuel ignite blood', Ultramagnetic MCs, 1996 (*Brainiac*)
- [028] 'power ignites the...', Four Horsemen of the Apocalypse, 1993 (*Bring it*); 'Artemis Level 4', *ibid*; 'I Get a Warp...', Ultramagnetic MCs, 1996 (*Smoking Dust*); 'I'll take your brain into another dimension...', Ultramagnetic MCs, Critical Beatdown, 1987 (*Critical Beatdown*); 'The Prodigy, 1992; 'truly confuse as...', Ultramagnetic MCs, 1987; 'advancing technical', *ibid*
- [029] 'charging energy at...', Ultramagnetic MCs, 1996 (*Brainiac*); 'boosting crystalloids ... as', *ibid*; 'cybotron, completely on...' *ibid*; 'To survive we must...', Cybotron, Sleeve Note Manifesto to Cybotron, 1985; 'What is an...', Rammellzee in Malu Halaza, *Soul Underground*, Summer 1988; 'your common and...', Sunz of Man, 1995b; 'Science and technology...', Virilio, 1983a, p62; '*Astro Black* is...', Sun Ra in Lock, 1994, p148
- [030] 'Turntable Terranova', The Mighty Upsetter, Sleeve Note Manifesto to The Mighty Upsetter, 1975; 'I'm here to...', Eric B & Rakim, 1988; 'Graffiti is not...', Bando in Chalfont & Prigoff, 1987, p72; 'Graffiti is a...', Rammellzee, Malu Halaza, 1988
- [031] 'Wildstyle is totally...', Fab 5 Freddy in Gablik, 1982, p72; 'ballet of postures...', McLuhan, 1962, p61; 'I make letters...', Bando, Chalfont & Prigoff, 1987, p 71; 'You have the...', Rammellzee, *Ikonoklast Panzerism Manifesto in Beat Culture*, *Artforum*, 1985, quoted in Tate, 1992, p155; 'Their sound is...', Rammellzee, *ibid*, p155; 'a constellation of...', Mailer, 1970, p149
- [032] 'a mathematician and...', Rammellzee, 1987; 'builds weapons for...', *ibid*; 'The Romans stole...', Rammellzee, *The Movement of the Letter: The Polishing of the Equation* Rammellzee in Dery, 1993, p739; 'means symbol destroyer...', Rammellzee, Tate, 1992, p155
- [033] 'on Aerodynamics and...', Rammellzee & Shock Dell, 1987; 'But we want...', *ibid*; 'All formation and...', *ibid*; 'As the Interrogator...', *ibid*; 'In a war...', Rammellzee, 1992, p145/155
- [034] 'Wrath of the...', from track title *Wrath of the Math*, Jeru the Damajaa, 1996; 'The infinity sign...', Rammellzee, Tate, 1992, p155; 'The 4 integers...', Rammellzee & Shock Dell, 1987; 'The effective mathematician...', Wiener, 1989, p xi
- [035] 'Mental Machine', Electrifying Mojo, from title of *The Mental Machine: a Book Opera*, Electrifying Mojo, 1993, J Stone Audio Books, 1993; 'You must talk...', Rammellzee & Shock

- Dell, 1987; 'Only he has...', *ibid*; 'You hold the...', *ibid*; 'You have just gotten...', *ibid*
 [036] 'We want you...', *ibid*; 'Sometimes I don't...', Kool Keith in Andre Daniel, *True Magazine*, July 1996; 'Space is my...', Dr Octagon, 1996 (*Earth People*)
 [038] 'I study and...', Kool Keith · Dr Octagon in Dave Tompkins, *Rap Pages*, July 1996;
 'When he says...', Dr Octagon, Tompkins, July, 1996; 'The forms of...', Felix Guattari, *Chaosmosis*, Power Publications, 1995, p36; 'elevation', Dr Octagon, July, Tompkins, 1996;
 'new terms...', *ibid*; 'advance technical' Kool Keith · Dr Octagon, Tompkins, July 1996;
 'program one and...', Dr Octagon, 1996 (3000)
 [039] 'I'll take a...', *ibid* (*Blue Flowers*); 'It's like if...', Dr Octagon, Tompkins, July, 1996;
 'Dr Octagon was...', *ibid*; 'Haloes were found...', *ibid*; 'I see it...' Keith · Daniel, July 1996
 [040] 'Vanishing victims kept...', Dr Octagon, 1996 (*Dr Octagon*); 'Megatron, Rejuvenate...',
ibid (*No Awareness*); 'Galaxy Rays powerful!', *ibid* (*Raise It Up*); 'Controlled by gamma
 lights...', *ibid* (*Earth People*); 'Octagon, oxygen...', *ibid*; 'walking through a...', *ibid* (*Technical
 Difficulties*); 'My first impression...', *ibid*
 [041] 'this sense of...', DuBois, 1969, p45; 'talking in everyone's...', Sir Menelik from Dr
 Octagon, 1996
 [042] 'What of the others...', Sir Menelik in James Tai, *URB 50*, Aug/Sept 96; 'the time
 when...', Chris Marker, *Sans soleil*, 1983; 'Does science reach...', Dr Octagon, 1996 (*On
 Production*); 'All mankind must...' Sir Menelik, from *ibid*
 [043] 'Acoustic death by...', *ibid*; 'increase magnetic fields...', Dr Octagon, 1996 (*On
 Production*); 'We think as...', Mixmaster Mike in Bucky Fukumoto & Jamandru Reynolds,
Grand Royale, Issue 4; 'It's the only...', Disk in Kevin Marques Moo, *URB 50*, Aug/Sept, 1996
 [044] 'Identification Code unidentified...', Dr Octagon, 1996 (*Dr Octagon*); 'skin is green...',
ibid; 'paramedic fetus of...', *ibid* (*Blue Flowers*); 'cybernetic microscopes', *ibid*; '2 telescopes
 that...' *ibid*; 'Church of the...', Dr Octagon, 1996 (*Blue Flowers*); 'a future pathological...',
 David Cronenberg in Chris Rodley, *Sight and Sound*, June 1996; 'out the skull,' Dr Octagon,
 1996 (*Earth People*); 'necks for the...', *ibid*; 'I study and...', Kool Keith · Dr Octagon,
 Tompkins, 1996; 'macroscope', from track title *Macroscope*, Cyclops 4000 · Sir Menelik,
 1997; 'operate on patients...', Kool Keith · Dr Octagon, Tompkins, 1996; 'intestinal surgery',
 Dr Octagon, 1996 (*I Got to Tell You*); 'saliva', *ibid*; 'basic human design', from track title
Basic Human Design from Jeff Mills, 1994
 [045] 'I would just...', Kool Keith · Dr Octagon, Tompkins, July, 1996; 'bees around your...',
 Dr Octagon, 1996 (*On Production*); 'naked pictures of,' *ibid* (*Dr Octagon*); 'the cartoon
 Donald', *ibid*; 'Sometime I don't...', Kool Keith · Dr Octagon, Tompkins, July, 1996; 'half
 shark, half...', Dr Octagon, 1996 (*Mr Gerbik*); 'masturbating with humans...', *ibid* (*Dr
 Octagon*); 'leading humans with...', *ibid*; 'all Earth people...', *ibid* (*Earth People*); 'you there
 like...', Kool Keith · Dr Octagon, Tompkins, July, 1996
 [046] 'Doctor Ludicrous into...', Dr Octagon, 1996 (*Dr Octagon*); 'The perfect enzyme's...',
ibid (*Technical Difficulties*); 'Oh man homey...', The Geto Boys, 1992
 [047] 'I'm having illusions...', Cypress Hill, 1995 (*Illusions*); 'Looking at the...', Sly Stone,
 1972; 'schizophony', R. Murray Schafer, *Radical Radio* in Strauss, 1993, p292; 'They took a
 sonogram...', Gravediggaz, 1994 (*Diary of*)
 [048] 'It's a form of psychosis...', Tricky in Gavin Martin, *NME*, 28 Oct 1995; 'I believe
 you're...', Redman in Adario Strange, *The Source*, Nov 1994
 [049] 'Now I dwell...', Gravediggaz, 1994; 'Holycore', Scientific Shabazz · Shabazz the
 Disciple in Joyce, *URB*, 40; 'Heaven and Hell is...', The RZA, Everett True, *Melody Maker*,
 Sept 17, 1994; 'learning the torture...', The RZA, Everett True, 1994

- [050] 'I contain the...', Sunz of Man, 1995b; 'Visions of me...', Sunz of Man, 1995a; 'the depths of', *ibid*; 'I was shown...', Genius, 1995
- [051] 'All this seems...', Antonin Artaud, *On the Balinese Theater* in Rothenberg & Rothenberg, 1983, p239; 'soldiers of idolatry...', Sunz of Man, 1995a; 'the universal warlord...', *ibid*; 'came together for...', *ibid*; 'Hearken as the...', *ibid*; 'be done away...', *ibid*; 'side effects...', *ibid*; 'insanity enters humanity...', *ibid*; 'this technique is...', *ibid*; 'the 4 run...', Sunz of Man, 1995b; 'a light beam...', Killah Priest, Genius, 1995; 'bring the wicked...', Sunz of Man, 1995a
- [052] 'Something outside had...', Dick, 1992, p209; 'We relinquished the...', *ibid*, p209-10
- [053] 'The brain is...', Deleuze & Guattari, 1987, p64; 'When you trip...', Manuel De Landa in Erik Davis, *Mondo 2000*, Nov 1992; 'I could get...', George Clinton in Lloyd Bradley, *Mojo*, Sept 1996; 'Descriptions of it...', Stevens, 1987, p343
- [054] 'The catastrophe represents...', J. G. Ballard, *Cataclysms and Dooms*, in Ballard, 1996, p209-10; 'We can't clean...', Clinton, Bradley, Sept 1996; 'We took the...', *ibid*; 'Thought is biological...', Rene Menil in Richardson & Fisalkowski, 1996, p150; 'Behold, I Am Funkadelic...', Funkadelic, 1970a
- [055] 'the eating of...', Sontag, 1994, p99; 'If you will...', Funkadelic, 1970a; 'I have tasted...', Funkadelic, 1971; 'could scare you...', Roy Haynes, Sleeve notes to Funkadelic, 1993
- [056] 'into the service...', Salvador Dali in Sartre, 1988, p153; 'my brain C3...', Jeru the Damajaa, 1994; 'Equipped with contradictory...', Delany, 1976, p26; 'Can you fly...', Tricky, 1995 (*Abbaon Fat*); 'Sampling allows...', Greg Tate in *The Last Angel of History*, 1995
- [057] 'Yesternow', from track title *Yesternow*, Davis, 1970; 'A mixture of...', Ishmael Reed, *Neo Hoodoo Manifesto* in Rothenberg & Rothenberg, 1983, p420
- [058] 'Headspace is the...', Schafer, 1973, p31
- [059] 'I feel alien...', Tricky in Simon Reynolds, *Melody Maker*, June 24, 1995; 'everything happens at...', Tricky, David Bennun, *Melody Maker*, Jan 21, 1995; 'My brain thinks...', Tricky, 1995 (*Hell is*)
- [060] 'The first sign...', Job in *The Lawnmower Man*; 'So it seems...', Tricky & Gravediggaz, 1996; 'I smoke a...', Tricky, Martin, Oct 1995; 'Space race the...', Tricky & Gravediggaz, 1996
- [061] 'I escape with...', Organized Konfusion, 1991; 'There is no...', Tricky & Gravediggaz, 1996; 'You have been...', *ibid*

- James Brown: *Mind Power* from *The Payback*, Polydor, 1973
- James Brown, *Revolution of the Mind*, Polydor, 1973
- Critical Beatdown: *Ain't It Good to You*; *When I Burn*; *Critical Beatdown* from *Critical Beatdown*, Next Plateau, 1987
- Cybotron, *Enter*, Fantasy Records, 1985
- Cyclops 4000: Sir Menelik, *Macroscope*, Ultimate Dilemma, 1997
- Cypress Hill: *Ultraviolet Dreams* from *Cypress Hill*, Ruffhouse/ Columbia, 1992
- Cypress Hill: *Illusions*; *Temple of Boom* from *Temple of Boom*, Ruffhouse/Columbia, 1995
- Miles Davis: *Yesternow* from *A Tribute to Jack Johnson*, Columbia, 1970
- Dr Octagon: *I Got to Tell You*; *Earth People*; *No Awareness*; *Technical Difficulties*; *Blue Flowers*; *Dr Octagon*; *Wild and Crazy*; *On Production* from *Dr Octagon*, Bulk/Mo Wax, 1996
- Electrifying Mojo, *The Mental Machine: a Book Opera*, J Stone Audio Books, 1993
- Eric B & Rakim, *Follow the Leader Dub*, MCA, 1988
- Four Horsemen of the Apocalypse: *Bring It Down to Earth*; *We Are the Horsemen*; *Raise it Up* from *Four Horsemen of the Apocalypse*, Mercury, 1993

- Funkadelic: *What Is Soul; Mommy What's A Funkadelic* from *Funkadelic*, Westbound, 1970a
- Funkadelic: *Eulogy and Light* from *Free Your Mind And Your Ass Will Follow*, Westbound, 1970b
- Funkadelic: *Maggot Brain; Wars of Armageddon* from *Maggot Brain*, Westbound, 1971
- Funkadelic: *America Eats Its Young* from *America Eats Its Young*, Westbound, 1972
- Funkadelic, *Cosmic Slop*, Westbound, 1973
- Funkadelic, *Standing on the Verge of Getting It On*, Westbound, 1974
- Funkadelic, *Let's Take It to the Stage*, Westbound, 1975
- Funkadelic, *Tales of Kidd Funkadelic*, Westbound, 1976
- Funkadelic, *Hardcore Jollies*, Westbound, 1976
- Funkadelic, *Music For Your Mother*, Westbound, 1993
- Genius: *Greyhound Part 2 Remix* from *Experimental Remixes*, Jon Spencer Blues Explosion, Matador, 1995
- The Geto Boys, *Mind Playing Tricks on Me*, Rap-a-Lot, 1992
- Jerry Goldsmith, *Planet of the Apes OST*, Project 3 Records, 1967
- Gravediggaz: *Diary of a Madman; Mommy What's a Gravedigga?; Dial 1-800 Suicide* from *Niggamortis*, Island, 1994
- Japan: *Ghost* from *Tin Drum*, Virgin, 1981
- Jeru the Damajaa: *Mental Stamina* from *The Sun Rises in the East*, frr, 1994
- Jeru the Damajaa, *Wrath of the Math*, Payday, 1996
- Led Zeppelin: *Friends* from *Led Zeppelin 3*, Atlantic, 1972
- Massive Attack, *Blue Lines*, Virgin, 1991
- Method Man: *Sub Crazy* from *Tical*, Def Jam, 1994
- The Mighty Upsetter, *Kung Fu Meets the Dragon*, Justice League, 1975
- Jeff Mills: *Basic Human Design* from *Waveform Transmissions Volume 3*, Tresor, 1994
- Organized Konfusion: *Releasing Hypnotical Gases* from *Organized Konfusion*, Hollywood Basic, 1991
- The Prodigy, *Outta Space*, XL, 1992
- Public Enemy: *Black Steel in the Hour of Chaos* from *It Takes a Nation of Millions to Hold Us Back*, Def Jam, 1988
- Rammellzee & Shock Dell, *The Lecture*, GeeStreet/Island Records, 1987
- Rammellzee vs K-Rob, *Beat Bop*, Profile Records, 1983
- Sly Stone: *Thank You Falletin Me Be Mice Elf Agin* from *There's A Riot Going On*, Edsel, 1972
- Sunz of Man, *Soldiers of Darkness*, Wu Tang Records, 1995a
- Sunz of Man, *Five Arch Angels*, Wu Tang Records, 1995b
- Tricky, *Aftermath*, Island, 1994
- Tricky: *Abbaon Fat Tracks; Hell Is Round the Corner* from *Maxinquaye*, Island, 1995
- Tricky & Gravediggaz, *Psychosis*, Island, 1996
- Ultramagnetic MCs: *Brainiac; Smoking Dust* from *The Basement Tapes*, Tuff City Records, 1996
- Ultramagnetic MCs: *MCs' Ultra (Part III)*, City Beat, 1987
- Stevie Wonder, *Innervisions*, Motown, 1973

- Jean-Michel Basquiat, *Pegasus*, painting, 1987
- Pedro Bell, Sleeve Art for *Cosmic Slop*, Westbound, 1973; *Standing on the Verge of Getting It On*, Westbound, 1974; *Let's Take It to the Stage*, Westbound, 1975; *Tales of Kidd Funkadelic*, Westbound, 1976; *Hardcore Jollies*, Westbound, 1976
- Don Brautigan, Sleeve Art for James Brown, *The Payback*, Polydor, 1973
- Effram Wolf, Sleeve Art to *Innervisions*, Motown, 1973

- *Atomic Cafe*, Kevin Rafferty/Jayne Loader/Pierce Rafferty, 1982, Academy Video
- *Beneath the Planet of the Apes*, Ted Post, 1970, NCA
- *Coma*, Michael Crichton, 1978, NCA
- *Dead Ringers*, David Cronenberg, 1988, 20th Century Fox Home Entertainment
- *Jacob's Ladder*, Adrian Lyne, 1990, 4 Front Video
- *The Last Angel of History*, John Akomfrah/Black Audio Film Collective, 1995, NCA
- *The Lawnmower Man*, Brett Leonard, 1992, First Independent Video
- *The Man Who Fell to Earth*, Nic Roeg, 1976, NCA
- *Sans soleil*, Chris Marker, 1983, Academy Video
- *The Terminator*, James Cameron, 1984, 4 Front Video

Thoughtware: Inner Spatializing the Song

- [062] 'I put my...', Lee Perry in Toop, 1995, p113
- [063] 'I introduce myself...', Indelible MCs, 1997; 'I see the...', Lee Perry in Toop, 1995, p113; 'You are listening...', Lee Perry in Kevin Martin, *The Wire*, May 1995; 'We're taking over...', The Mighty Upsetter, SleeveNote Manifesto to The Mighty Upsetter, 1975; 'Well, the drums...', Lee Perry in Thomas Markett, *Grand Royale 2*, 1995-1996; 'The drum controls...', Lee Perry in Toop, 1995, p114
- [064] 'We are here...', The Mighty Upsetter, SleeveNote Manifesto to The Mighty Upsetter, 1975
- [065] 'So me join...', Lee Perry, Martin, 1995
- [066] 'His method of...', Steve Barrow in *Dubcatcher*, April/May 1994
- 4 Hero: *The Paranormal in Four Forms* from *Various Artists, Macro Dub Infection*, Virgin, 1995
 - Indelible MCs, *The Fire in Which You Burn*, Rawkus, 1997
 - The Mighty Upsetter, *Kung Fu Meets the Dragon*, Justice League, 1975
 - The Mighty Upsetter: *The Tackro* from *Shocks of the Mighty*, Attack, 1988
 - The Upsetter: *Bird in Hand; The Lion* from *Return of the Super Ape*, Trojan, 1978
 - The Upsetter: *Revolution Dub; Woman's Dub; Kojak; Bush Weed; Rain Drops* from *Revolution Dub*, Esoldun, 1975
 - *Farewell my Concubine*, Chen Kaige, 1993, Artificial Eye
 - *Persona*, Ingmar Bergman, 1966, NCA

Thoughtware: Virtualizing the Breakbeat

- [068] 'Technology has made...', Goldie in *The Last Angel of History*, 1995; 'Our drummers don't...', Kraftwerk, Andy Gill, *Mojo*, April 1997; 'thinking and hearing...', *ibid*; 'we've lost the...', Goldie in *Musik*, 1995; 'you're reading the...', *ibid*; 'You end up with...', Dego McFarlane in Tim Barr, *The Mix*, Aug 1996
- [069] 'used to talk...', Dego McFarlane in Bethan Cole, *Mixmag*, Feb 1995; 'audiomaze', from track title *Audiomaze*, Gachet, 1995; 'subcraziness', from track title *SubCrazy*, Method Man, 1994; 'kids coming up...', Dego McFarlane in *Musik*, 1995
- [070] 'Science today has...', Paul Virilio, *Block 14*, Autumn 1988; 'phantasmaphysics', Foucault, 1977, p172; 'speculative fantasy of...', Ballard, 1996, p198

DATAMINING THE INFOVERSE

- Jerome Agel (ed), *The Making of Kubrick's 2001*, Signet, 1970
- Umbrio Appollonio, (ed), *Futurist Manifestos*, Thames and Hudson, 1973
- Archigram, *A Guide to Archigram 1961-1974*, Academy Editions
- J. G. Ballard, *The Atrocity Exhibition*, Pan, 1970
- J. G. Ballard, *Myths of the Near Future*, Vintage, 1994
- J. G. Ballard, *A User's Guide to the Millennium*, HarperCollins, 1996
- Roland Barthes, *Sade, Fourier, Loyola*, Jonathan Cape, 1977
- Jean Baudrillard, *The Gulf War Did Not Take Place*, Power Publications, 1995
- Paul Beatty, *The White Boy Shuffle*, Minerva, 1996
- Michael Benedikt (ed), *Cyberspace: First Steps*, MIT Press, 1991
- Walter Benjamin, *Illuminations*, Fontana Press, 1992
- Adrian Boot & Chris Salewicz, *Jimi Hendrix: The Ultimate Experience*, Boxtree, 1995
- John Brockman & Ed Rosenfeld (eds), *Real Time*, Picador, 1973
- Scott Bukatman, *Terminal Identity*, Duke University Press, 1993
- William Burroughs, *The Ticket that Exploded*, Paladin, 1987
- Pascal Bussy, *Kraftwerk*, SAF Publishing, 1993
- Samuel Butler, *Erewhon*, Heron Books, 1969
- Pat Cadigan, *Synners*, HarperCollins, 1991
- Karel Capek, *RUR, Rossum's Universal Robots*, Vydalo Aventinium, 1923
- Ian Carr, *Miles Davis*, Quartet Books, 1992
- Henry Chalfont & Martha Palmer, *Subway Art*, Thames & Hudson, 1984
- Henry Chalfont & James Prigoff, *Spray Can Art*, Thames & Hudson, 1987
- Michel Chion, *AudioVision*, Columbia University Press, 1994

- Arthur C. Clarke, *How the World was One*, Victor Gollancz, 1992
- Peter Cook (ed), *Archigram*, Studio Vista, 1972
- John Corbett, *Extended Play*, Duke University Press, 1994
- Jonathan Cott, *Stockhausen, Conversations with the Composer*, Robson Books, 1974
- Jonathan Crary & Sanford Kwinzer (eds), *Zone 6: Incorporations*, Zone Books, 1992
- Dennis Crompton (ed), *Concerning Archigram*, Archigram Archives, 1998
- Critical Art Ensemble, *The Electronic Disturbance*, Autonomedia, 1994
- Salvador Dali, *The Secret Life of Salvador Dali*, Vision Press, 1968
- Salvador Dali, *Diary of a Genius*, Creation Books, 1994
- Les Daniels, *Marvel: Five Fabulous Decades of the World's Greatest Comics*, Virgin Books, 1991
- Les Daniels, *DC Comics: Sixty Years of the World's Favorite Comic Book Heroes*, Virgin Books, 1995
- Manuel De Landa, *War in the Age of Intelligent Machines*, Zone Books, 1991
- Samuel R. Delany, *Dhalgren*, Bantam, 1976
- Gilles Deleuze & Felix Guattari, *Anti Oedipus*, Athlone Press, 1984
- Gilles Deleuze & Felix Guattari, *A Thousand Plateaux*, University of Minnesota Press, 1987
- Gilles Deleuze, *Negotiations*, Columbia University Press, 1990
- Mark Dery (ed), *Flame Wars*, Duke University Press, 1993
- Mark Dery, *Escape Velocity*, Hodder & Stoughton, 1996
- Philip K. Dick, *Valis*, Grafton, 1992
- W. E. B. DuBois, *The Souls of Black Folk*, Signet Classic, 1969
- Ralph Ellison, *The Invisible Man*, Penguin Books, 1984
- Brian Eno, *A Year with Swollen Appendices*, Faber & Faber, 1996
- M. C. Escher, *Exploring the Infinite: Escher on Escher* (trans Karin Ford), Harry N. Abrams Inc, 1989
- Frantz Fanon, *The Wretched of the Earth*, Penguin, 1967
- Gene Feldman & Max Gartenberg (eds), *Protest: The Beat Generation and the Angry Young Men*, Panther, 1960
- Michel Foucault, *Language, Counter-Memory, Practice*, Cornell University, 1977
- Suzy Gablik, *Brand New York*, ICA Editions, 1982
- Hartmut Geerken & Bernhard Hefe, *Omniverse Sun Ra*, Waitawhile, 1994
- Nelson George, *The Death of Rhythm and Blues*, Pantheon Books, 1988
- Nelson George, *Buppies, B-Boys, Baps & Bohos*, HarperCollins, 1992
- William Gibson, *Neuromancer*, Victor Gollancz, 1984
- William Gibson, *Virtual Light*, Viking, 1993
- Paul Gilroy, *The Black Atlantic*, Verso, 1993
- Jean-Luc Godard, *Pierrot le Fou*, Lorimer Publishing, 1969
- Felix Guattari, *Chaosmosis*, Power Publications, 1995
- Joe Haldeman, *The Forever War*, Futura, 1977
- Joe Haldeman, *Star Trek: World Without End*, Bantam, 1979
- Donna Haraway, *Simians, Cyborgs and Women*, Routledge, 1991
- David Henderson, *'Scuse Me While I Kiss the Sky*, Bantam, 1981
- Arthur Jafa, 69 in Michele Wallace (ed), *Black Popular Culture*, Bay Press, 1992
- Darius James, *That's Blaxploitation*, St Martins Press, 1995
- George M. James, *Stolen Legacy*, Africa World Press, 1992
- Allan Jones (ed), *First Among Sequels*, BPC Paperbacks, 1996
- Leroi Jones, *Blues People*, Morrow Quill, 1963

- Leroi Jones, *Black Music*, Quill, 1967
- Charles Keil & Steven Feld, *Music Grooves*, University of Chicago Press, 1994
- Kevin Kelly, *Out of Control*, Fourth Estate, 1994
- Chris Kempster (ed), *History of House*, Castle Communications, 1996
- Richard Kostelanetz (ed), *John Cage*, Allen Lane, 1970
- Richard Kostelanetz, *Dictionary of the Avant Garde*, accapella books, 1993
- Donna Kurtz, *Kooks*, Feral House, 1995
- Michael Kurtz, *Stockhausen* (trans. Richard Toop), Faber & Faber, 1992
- Michel Leiris, *Brides: Broken Branches*, North Point Press, 1989
- John C. Lily, *Programming and Metaprogramming in the Human Biocomputer*, Bantam Books, 1974
- Graham Lock, *Forces in Motion*, Quartet Books, 1988
- Graham Lock, *Chasing the Vibration*, Stride Publications, 1994
- Robin Maconie, *Stockhausen*, OUP, 1976
- Larry McCaffery (ed), *Across the Wounded Galaxies*, University of Illinois Press, 1990
- Marshall McLuhan, *The Gutenberg Galaxy*, Signet, 1962/1969
- Marshall McLuhan, *The Mechanical Bride*, Beacon Press, 1967a
- Marshall McLuhan, *Understanding Media*, Sphere Books, 1967b
- Marshall McLuhan & Quentin Fiore, *The Medium is the Massage*, Penguin Books, 1967
- Marshall McLuhan & Quentin Fiore, *War and Peace in the Global Village*, Bantam Books, 1968
- Norman Mailer, *A Fire on the Moon*, Weidenfeld & Nicholson, 1970
- Philip Marchand, *Marshall McLuhan*, Ticknor & Fields, 1989
- Richard Marshall, *Jean-Michel Basquiat*, Whitney Museum of American Art, 1994
- Stephen Metcalf (trans and ed), Friedrich Nietzsche, *Hammer of the Gods*, Creation Books, 1995
- Walter Miller, *A Canticle for Leibowitz*, Lippincott, 1960
- Mattie Molinaro, Corinne McLuhan & William Toye (selec and ed), *Letters of Marshall McLuhan*, OUP, 1987
- Tim Nevill (ed), *Karlheinz Stockhausen, Towards a Cosmic Music*, Element Books, 1989
- Friedrich Nietzsche, *Untimely Meditations*, Cambridge University Press, 1983
- o[rphan] d[rift·], *o[rphan] d[rift·]*, Cabinet Editions, 1995
- Fernand Ouellette, *Edgard Varèse*, Calder & Boyars, 1973
- Yambo Ouologuem, *Bound to Violence*, Heinemann, 1986
- Robert Pepperall, *The Post Human Condition*, Intellect Books, 1996
- Sadie Plant, *The Virtual Complexity of Culture in Future Natural*, Robertson, Mash, Tickner, Bird, Curtis & Putnam, (eds), Routledge, 1996
- Ishmael Reed, *Flight to Canada*, Atheneum, 1976
- Ishmael Reed, *Mumbo Jumbo*, Alison & Busby, 1978
- Ishmael Reed, *Neo Hoodoo Manifesto* in Jerome & Diane Rothenberg (eds), *Symposium of the Whole*, University of Chicago Press, 1983
- Ishmael Reed, *Shrovetide in Old New Orleans*, Atheneum, 1989
- Wilhelm Reich, *The Function of the Orgasm*, Bantam Books, 1967
- Simon Reynolds, *Blissed Out*, Serpents Tail, 1990
- Simon Reynolds & Joy Press, *The Sex Revolts*, Serpents Tail, 1995
- Michael Richardson & Krzysztof Fiskowski (eds and trans), *Refusal of the Shadow*, Verso, 1996
- Robertson, Mash, Tickner, Bird, Curtis & Putnam, (eds), *Future Natural*, Routledge, 1996
- Cynthia Rose, *Living in America*, Serpents Tail, 1990
- Tricia Rose, *Black Noise*, Wesleyan University Press, 1994

- Andrew Ross & Tricia Rose, (eds), *Microphone Fiends*, Routledge, 1994
- Jerome & Diane Rothenberg (eds), *Symposium of the Whole*, University of California, Press, 1983
- Ross Russell, *Bird*, Quartet Books, 1994
- Dorion Sagan, *Biospheres*, Arkana, 1990
- Jean Paul Sartre, *What Is Literature? and Other Essays*, Harvard University Press, 1988
- Susan Sontag, *Against Interpretation*, Vintage, 1994
- R. Murray Schafer, *The Tuning of the World*, Alfred A. Knopf, 1977
- R. Murray Schafer, *The Music of the Environment in Cultures Volume 1 No 1*, UNESCO, 1973
- Ben Sidran, *Black Talk*, Payback Press, 1995
- Gerald Emanuel Stearn (ed), *McLuhan: Hot and Cool*, Penguin Books, 1968
- Bruce Sterling, *Spook in Crystal Express*, Legend, 1990
- Bruce Sterling, *Schizmatrix*, Penguin, 1995
- Bruce Sterling, *Schizmatrix Plus*, Ace Books, 1996
- Jay Stevens, *Storming Heaven*, Heinemann, 1987
- Julian Stallabrass, *Gargantua*, Verso, 1996
- Neil Strauss (ed), *Radiotext(e)*, Semiotext(e), 1993
- Roger Sutherland, *New Perspectives in Music*, Sun Tavern Fields, 1994
- Greg Tate, *Flyboy in the Buttermilk*, Simon & Shuster, 1992
- Greg Tate, *Altered Spade: Readings in Race Mutation Theory* in Andrew Ross & Tricia Rose, (eds), *Microphone Fiends*, Routledge, 1994
- Eric Tamm, *Brian Eno, his Music and the Vertical Colour of Sound*, Faber & Faber, 1989
- J. C. Thomas, *Chasin' the Trane*, Da Capo, 1994
- Caroline Tisdall & Angelo Bozzola, *Futurism*, Thames & Hudson, 1977
- Stephen Todd & William Latham, *Evolutionary Art and Computers*, Academic Press, 1992
- Alvin Toffler, *The Third Wave*, Pan Books, 1980
- David Toop, *The Rap Attack*, Pluto Press, 1982/1994
- David Toop, *Rap Attack 2*, Serpents Tail, 1991
- David Toop, *Ocean of Sound*, Serpents Tail, 1995
- Roger Trilling & Stuart Swezey (eds), *The Wild Palms Reader*, St Martins Press, 1993
- Amos Tutola, *My Life in the Bush of Ghosts*, Faber & Faber, 1990
- V. Vale & Andrea Juno (eds), *Re/Search 8/9: J. G. Ballard*, Re/Search, 1984
- V. Vale & Andrea Juno (eds), *Re/Search 15: Incredibly Strange Music Volume II*, Re/Search, 1994
- Rickey Vincent, *Funk*, St Martins Griffin, 1996
- Paul Virilio, *Pure War*, Semiotext(e), 1983a
- Paul Virilio, *Speed and Politics*, Semiotext(e), 1983b
- Paul Virilio, *War and Cinema*, Verso, 1989
- Paul Virilio, *The Lost Dimension*, Semiotext(e), 1991
- Paul Virilio, *The Vision Machine*, BFI, 1994
- Paul Virilio, *The Art of the Motor*, University of Minnesota, 1995
- Eric Weisbard with Craig Marks (eds), *Spin Alternative Record Guide*, Vintage Books, 1995
- Norbert Wiener, *The Human Use of Human Beings*, Free Association Books, 1989
- Valerie Wilmer, *As Serious as Your Life*, Quartet Books, 1977
- Jack Womack, *Terraplane*, Grafton Books, 1991
- Jack Womack, *Elvissey*, HarperCollins, 1993
- Jack Womack, *Random Acts of Senseless Violence*, HarperCollins, 1993
- Iannis Xenakis, *Formalised Music*, University of Indiana Press, 1974

Co Pilots: Steve Beard, Edward George, Mark Sinker.

Optimizers: Grandpa, Adelaide Eshun, Joe Eshun, Esi Eshun, Araba Eshun, Ekow Eshun, Helen Boateng, Tony Boateng, Angela Ackun, Sam Mensah, Kwesi Eshun, Thomas Eshun, Janet Karikari, Josephine Eshun.

Accelerators: Sadie Plant, J. G. Ballard, Marshall McLuhan, Simon Reynolds, Greg Tate, Fred Vermorel, Paul Beatty, Archigram (Ron Herron, Warren Chalk, Dennis Crompton, David Greene, Peter Cook, Michael Webb), David Toop, Ian Penman, Chris Marker, Jack Womack, Filipo Marinetti, Giacomo Balla, Umberto Boccioni, Maya Deren, William Gibson, Samuel R. Delany, Yambo Ouologuem, Manuel De Landa, Pat Cadigan, Ben Sidran, Masumune Shirow, Lynn Margulis, Rene Menil, Ilya Prigogine, Arthur Jafa, Isabelle Stengers, Rodney Brooks, [Orphan] D[rift], Neil Kulkarni, Peter Shapiro, Dave Tompkins, Suzanne Cesaire, Samuel Butler, Vera Chytilova, Nic Roeg, Daniel Dennett, Ishmael Reed, Jean-Luc Godard, Michel Chion, Tom Wilson, David Henderson, Geert Lovink, Aime Cesaire, Erik Davis, Bruce Sterling, Jean Michel Basquiat, Robert Rauschenberg, Gilles Deleuze, Frantz Fanon, Felix Guattari, William S. Burroughs, Paul D. Miller, Paul Virilio, Matthew Barney, Colson Whitehead, Bridget Riley, Christof Steinegger, Brian Eno, Nick Land, Francis Bacon, Wong Kar-Wai, Oswald de Andrade, Leslie Fiedler, The Wire, Wyndham Lewis, Katsuhiko Otomo.

Intensifiers: Ian Sen, Deirdre Crowley, Duke Odiachi, Stella Kane, Jim McClellan, Travis, Jeni Glasgow, Tony Marcus, Matthew Collin, Bethan Cole, Rupert Howe, AnnMarie Davy, Matt ffytche, Melanie Beer, Pippa Moreau, Nadja Abdelkader, Dego McFarlane, John O'Reilly, Sharon Bowes, Black Audio Film Collective (David Lawson, John Akomfrah, Reece Auguiste, Avril Johnson, Lina Gopaul), Orly Klein, Simon Hopkins, Raymond Oaka, Stephen J. Metcalfe, Joy Press, Heiko Hoffmann, Thaddie Hermann, Michael Cornelius, Peter Kruder, Ulf Poschardt, Robert Jelinek, Hans Kulisich, Richard Sen, Lynn Leaver, Dympna Sherry, Mark Fisher, Anne Greenspan, Cybernetic Culture Research Unit, Richard Thompson, Viv Boyd, Elaine O'Donoghue, Olywn Doran, Helen Leary, Helen Mills, Martin Takawira, Gideon Hollis, Adele Yaron, Kevin Martin, Rob Bulman, Sean 'P-Ski' Pennycook, Howard Hageman, Adrian 'Blunt' Hughes, Hector Heathcote, Mick Kirkman.

In Memoriam: Michelle Stavrino