

ANALOG

FRONT COVER: Richard Nicholson

*Roy Bass darkroom, Michael Dyer Associates, Covent
Garden 2006*

THIS PAGE: Richard Nicholson

Gordon Bishop Associates, Puddington Street 2006

INSIDE BACK COVER FLAP: Karlheinz Stockhausen
in the studio, *Lebrecht Music & Arts*



ANALOG

trends in sound and picture

RICHARD NICHOLSON

CLARE MITTEN

KITTY, DAISY & LEWIS

ZIGELBAUM + COELHO

A *Riflemaker* EXHIBITION
JANUARY - FEBRUARY 2011

Richard Nicholson

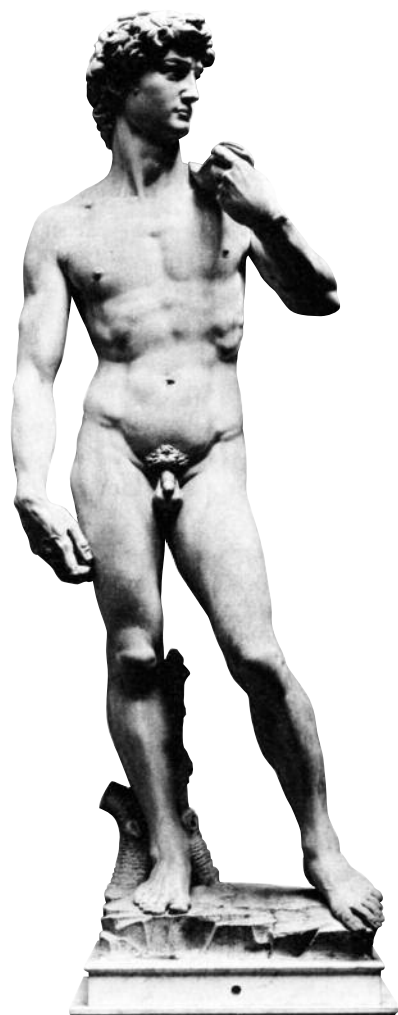
Roy Snell darkroom, Earlsfield 2006



Michelangelo Buonarroti (1475 - 1564)

David

carved marble and claw chiselled statue,
Accademia, Florence 1506



ANALOG

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INTRODUCTION BY TOT TAYLOR

August 2009. I arrive at my home in Cornwall to find that the Government have 'turned off' the analogue signal. A big thing to do; turning off Cornwall. It appears that the county has been chosen as the guinea-pig for a nationwide analogue deletion due to be completed the length and breadth of Britain by June 2011.

Consequently, nothing works. By nothing, I mean the TV – an onscreen alert announcing the familiar 'no signal', but today for unfamiliar reasons. And this time there is no fiddling with indoor antennae, bending of wire coat-hangers or incremental adjustment of channel-tracking. Nothing at all to improve or fiddle with. It just ain't there anymore.

I decide to go digital even faster than Cornwall, and discover online that I, along with everyone else who wishes to tune in along the South West peninsula will, from now on, need to purchase a box called *Freeview*. But though the view may be free the box is not. Cost: £24 + VAT (from your nearest stockist), of which the VAT brings £4.20 into the government deficit. £4.20 x 140 million TV watchers (*Trakfirst statistic: number of TV sets in Britain 2008*) being a good, substantial – and no doubt these days necessary – amount of national viewing added tax. Otherwise, the only recourse is to purchase a brand new set. Even more tax to help underwrite the cost of three huge wars, one thousand new hospitals or fifty shoddy housing developments, and all by just turning something off.

The thing is, I like Analogue, and I do not want them to delete it. Analogue to me, has always meant records – bits of music on plastic – and books, the paper, page-turning kind; photographs that I can take with my treasured Leica, then, via trial and error in the darkroom, mess around with, improve upon, and print. Admittedly, Analogue is not exactly a very 'convenient' format – never has been. Record-players, hi-fi's, film-

based cameras, domestic telephones, kitchen radios, novels, magazines – and tellys, are chunky, often heavy, inconvenient things. Not always easy to transport, maintain, or store. But they're beautiful, aren't they? Things which keep us going; easy accessories. And they work, after all these years – more or less.

Summer 2010. I get to thinking about the bigger picture. Of course, I use digital, it's not that I don't want it or don't like it. I need it. To get online, to watch *YouTube* when I'm not watching TV. And, let's face it, to do just about everything else available in this new New Age. Then suddenly, I hear that the analogue turn-off may be delayed. No doubt, as with so much that is politically delicate, with a silence equal in volume to that of the loudness employed for its announcement.

MARBLE STATUES

The Rifleman exhibition *ANALOG* considers the transformation in the worlds of photography and music brought about by the digital era.

On the photographic side, Richard Nicholson's images of professional darkrooms in and around London; most of them closed over the past five years, i.e. since Nicholson began photographing them. On the music side, a very young, very successful band, Kitty, Daisy & Lewis, discuss the benefits of using analogue equipment to record their music, instead of sound-card or memory-stick. As they explain, solely for the purpose of sonic quality, warmth of sound, and, as they put it themselves, "humanity" (p33).

A couple of strands spring from this initial viewing and listening.

1. The digital revolution in photography has all but closed the commercial darkrooms, done away with large-format film cameras and the need to actually develop, process or print out anything; images now being emailed, placed in virtual caskets (folders) and probably in most cases, quickly forgotten. The reason is two-fold: convenience of new format, and cheapness of new format. If that *is* a downside, then there is also an up – the renewed interest in picture-taking from previous eras, particularly Victorian photography, its methods and its 'look', presumably linked to the renewed, worldwide interest in Genealogy and our ancestors. Suddenly we are seeing more of them, these previously dark figures posing in provincial photographic studios several generations back who now seem more familiar, more recognisable and connected to us than they used to. The family photographic archive becoming more wanted, more cherished, more scarce and therefore more valuable.

Dark Room: – 'camera' (room) 'obscura' (dark)

Weltron 2007
(1966 Japan)
turntable with integrated cassette
and AM/FM radio



A good deal of evidence has been beautifully captured by Richard Nicholson's recording of professional darkrooms in and around London. When Nicholson began to shoot his project, some 204 commercial darkrooms were still in existence, continuing the printing of image from film-stock to paper within the new digital era. When he completed it some three years later, only 12 remained.

The photographs portray the almost spiritual presence of the machines, enlargers and developers, which lord it over these time capsules and cubicles, as well as the utter emptiness of rooms which have been inhabited in many cases by the same individual for maybe two, three or even four dark decades. The room, its four walls, the machinery, the operator, the man – few women run darkrooms – no longer necessary. The job, the demand, the service, the thought... no longer there. No *Elle Deco* or *World of Interiors* double-page spreads to trouble these unsociable addresses, no Design Council, RIBA or English Heritage to patrol or mourn them.

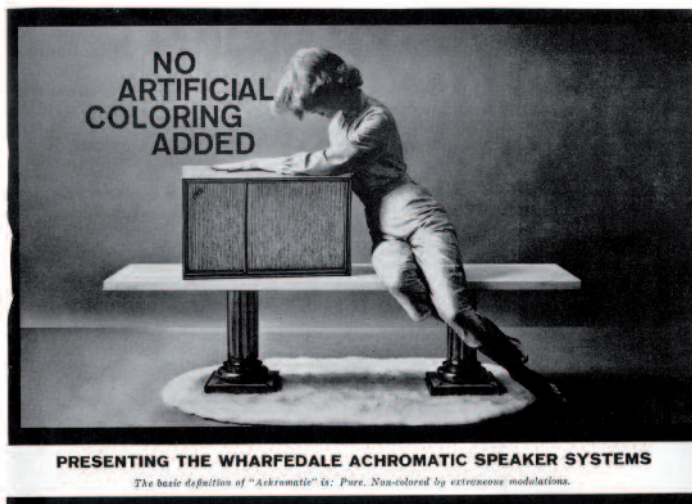
With these disappearances, some comforting brand names have excused themselves also. Kodak and Ilford; totally 'household' and once all-powerful, are submerged. Polaroid: cute and fun, with its own luxe emulsion and natural fade-out over time, now reserved for specialist sales and cool-hunters' wanted lists. Passport booths, near extinction. *Snappy Snaps* snuffed out. Chemist's 'same day service', no longer any kind of enticement or selling point.

Something else interesting... the fact that *camera obscura* – the long name for a 'camera' – does of course mean 'dark room'; an image which is conceived in one dark room is born into another. And something inspired about the idea of Nicholson photographing a room which has literally nil decorative element, no point in getting

very particular about a room – a ‘camera’ – which will spend 99% of its life in darkness. No need to fill holes or repaint walls. The room will never ‘need updating’ in any local rag property supplement. Not a place in which to chill, hang out or entertain.

But the darkroom, for all of its bare, functional fixtures, is, of course, a place of wonder. Of absolute invention and imagining; tinkering, making and remaking, of judgements, selections, decisions, surprises and, of course, sometimes... disappointments.

2. In music recording, the ‘death of vinyl’ has led to a growth in vinyl. Sales of vinyl recordings, flat, black discs, old and new, growing at a rate of 15 - 20% year on year over the past five years. The albums and singles purchased not only by the middle-aged, retro consumer, but also by ‘the kids’. The demographic shows that the kids (in particular, 12-18 year olds) are now buying plastic ¹. The pink rexine-covered record-player, the means to play records, in all of its permutations and all of its glory, now a staple of kickass window displays in teen boutiques all the way from Soho to Aoyama; the all-in-one box made by the likes of Dansette, Fidelity, HMV and Decca, the most hunted item of all among the late teens (portable cassettes are apparently the next big thing), with the teak high-fidelity stereogram an office must-have of creative directors, viral marketers, virtual tastemakers and department store grantees. Dieter Rams hi-end hi-fi’s appear in Sotheby’s and Christie’s auction catalogues; their prices having now risen to the level of real, actual *Art*.



3. ARCHIVING: The Master; i.e. the absolute original, sole thing, non-multiple, non-copy; the ‘negative’ if you like, that from which all others are pressed, printed and duplicated. What format does that now assume? And... where exactly is that Master?

On movie film, the absolute Master – the negative or ‘neg’ – used to be nitrate, but now Martin Scorsese and the AFI (American Film Institute) pay for every frame of Powell/Pressburger or Frank Capra to be copied and inter-negged – digitally presumably – edits smoothed in *Final Cut Pro*, audio tracks remastered in *Protools* or *Logic* – for a new digital ‘print’ to be... printed (i.e. ‘analogued’) out. We all have *Garageband* on our laps, we flirt with *iTunes*, download legally and illegally; the tracks we listen to being ‘limited’, i.e. having bits (certain heavier memory-consuming frequencies) chopped out of them in order to take up less virtual space on our systems, and be more easily, and more conveniently, downloadable and storable by consumers. Compare one of these mp3 laptop snacks with the original shiny black gatefold and you may be surprised by what you hear.

So what is/where is the *Master* or *Mother* nowadays exactly? What actual form is that original master-tape, reel of film or photo negative in?

This thought takes us back much further, to a time before electronics, before illumination or enlightenment, being that point around the year when Benjamin Franklin realised the power of a lightning flash (1850) or Edison ‘discovered’ sound (1912). Back even further, to Michelangelo’s statues, something unswervingly Analogue. How on earth, and where on earth, do we protect and preserve the absolute Master of our new ‘single’ (the term, and format, now also redundant), our photo-session, our debut feature or novel?

The marble statue, something apparently indestructible, is surely the answer. Cave drawings are the answer. Shifting sands are the answer. Just how safe is that indestructible force earmarked for the post-death museum donation, the Shakespeare folio, the Dickens³ handwritten copy, Rolling Stones 8-tracks – even Madonna 24-tracks! The thing you created which can – as far as we have always understood – *never* be destroyed?

The answer is that there are no Masters today. There is no ‘indestructible’ anymore, no ‘forever’. Maybe there never was, we just accepted that there was. So don’t worry about it. The thing you created does exist, in reproduction form certainly, and unless you are panic-stricken about preservation and quality to a manic degree it’s just not worth anymore trying to or wanting these new things to exist in an analogue world. Marble statues are most definitely the very newest thing. The ultimate *Master* or *Mother*, the ultimate *Analog*, and so it follows, the ultimate ‘digital’.

DEFINITIONS

So what's it mean, this Analogue word? Like yourself, I thought I knew – before we began. Something to do with... not being 'digital', for a start. And... if that's the case then... yeah... what does this 'digital' word/thing actually mean?

The term – the word – ANALOGUE (*Analog* US) surely implies something physical; real, right-on, 'on-tape', that is, on film, on paper... on *something*. Printed; a 'relief' maybe, 'stamped', 'indented' – as opposed to?

A cursory look in any dictionary pre-1980, i.e. pre-digital, actually reveals very little. Precisely nothing, in fact; our word yet to make a meaningful entrance into the common secondhand-bookshop lexicon. But there are other similar and interesting words/terms; 'analogous', 'analogy', for example, and so a sentence begins to form about comparisons, narratives, more particularly those involving soundwaves/waveforms, vibrations moving through air, images recorded on film, then processed/printed out, as opposed to being parked (film) and emailed. And so I pick up a brand new (though still analogue) 2010 Penguin pocket dictionary and turn to 'A'...

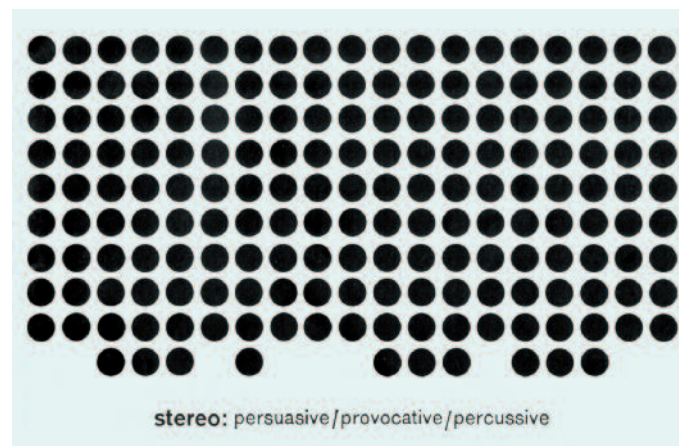
"Of a computer, using data supplied in a stream, if numbers" (but I thought that was 'digital')? "represented by directly measurable quantities, e.g. voltages of mechanical rotation" (seems more like it), "*compare DIGITAL 2: of a clock or watch, using hands to indicate time rather than an electronic display: compare DIGITAL 3: a way of recording sound: converting sound waves into a continuous electronic waveform*" – exactly! – **Compare DIGITAL!**

So... this exhibition exists not to present any kind of conclusion or case-closed investigation, but to offer up a notion: "Have you ever considered?", "Does this sound interesting?", Even... "if you liked this you might like"... before we leave it all with the audience and move swiftly on.

AND SO

ANALOG (kind of) stands for so many different things. Above all, it seems to infer something which has gone; done its bit. Disappeared the way of plate cameras and Polaroid, iron filings on Ampex 2" tape, heavy to handle 48 multi-track recording-machines – those things on which (most of) your favourite songs of all time were taped – 'committed to tape' as they say. Gone and fell asleep on the page, instead of the e-reader.

As regards 20th century 'contemporary music', tape as an analogue format itself



became a musical instrument due to the early experimentation of Pierre Schaeffer with tape splicing and Karlheinz Stockhausen's edited tape loops recorded on custom-built 6-track machines at the *Studio for Music Concrete*. Will these 'tape-recorder symphonies' now be filed away in contemporary classical sub-genres alongside Christopher Hogwood and his Academy of Ancient Instruments.²

ANALOG is the tick-tock of the stately clock – as opposed to the bleep of it. It's the click-clack of the wooden metronome as opposed to the arse-tight 'pip' of it; it's 'real noise' instead of interference, true *Loudness* instead of empty distortion, heart monitor-quality waveforms instead of vain self-seeking digits. And it's certainly most wanted, or it is right now anyway – 'vintage' even.

DISAPPEARING RECORDING STUDIOS

London's great factories of sound over the past five decades are now deceased; Olympic Studios in Barnes (the Stones, Led Zep), Mayfair in Primrose Hill, (redeveloped as the Museum of Everything), superhip Trident (Ziggy Stardust, T.Rex, the first 8-track studio in London) in Soho's St. Anne's Court – turned into TV commercial dubbing-rooms. In New York the big-hitters, the legendary Hit Factory and its main competitor The Record Plant, both gone to residential development.

Even the shrine itself, EMI's Abbey Road (Beatles, Pink Floyd, the Shadows, Glenn Miller, Sir Edward Elgar) rumoured to be in the process of being sold off by its parent company, to the consternation of many who might have assumed that the National Trust would step in and make more income from guided tours than these hallowed halls did in their hit-picking heyday.

These disappeared and disappearing studios point to the extinction not only of the superbly and often idiosyncratically equipped place itself but also all of the detailed know-how that goes with it. Skills built up over decades, procedures developed through doing – ‘assisting’. Music recording being one of the last industries to employ full-time apprentices – ‘tape-ops’, as they became known.

ABSOLUTELY LIVE

The band Kitty, Daisy & Lewis, together with other new groups bucking the trend (notably, the well-established Bad Seeds and The White Stripes) who might prefer the warmth and also the actual procedure of recording using tape, will install just enough analogue racks in our first floor lounge to record themselves and selected guest artists.

The equipment in the band’s home-made studio comes from the legendary Fame Studios in Muscle Shoals (Aretha Franklin, Wilson Pickett, Allman Brothers) and Elvis Presley’s RCA Studios in New York.

From humble beginnings in and around Camden, K, D & L were invited by Coldplay to join them on their 2009 tour of North America. They’ve also supported Mark Ronson and Razorlight. They can be seen from time to time gracing the dives of North London (p32).

GOIN’ BACK

In an ironic twist on all of the above, Clare Mitten takes everyday digital hardware, laptops, computers, radios, phones, and ‘analogues’ them, transforming familiar hi-design items into, or perhaps back to, their cardboard, mannequin-like selves (p28).

The exhibition is completed by a ‘resolutely digital’ computational light room by Zigelbaum + Coelho, co-winners of the *Designers of the Future Award* at this year’s Design Miami/Basel. The installation *Six-Fourty by Four Eighty* recontextualizes the common pixel by introducing it into the physical world, i.e. beyond the confines of the screen. Up to the viewer to decide whether this means moving from the digital world back to analogue or vice-versa. (p22).

So... it seems that out of every disappearance comes progress, and so it is with the graceful bowing-out of all things Analog. Great word, isn’t it?

Tot Taylor is co-founder of Riflemaker.

Smart 845 amplifier with triode output tube ©Unison Research 1984



FURTHER READING

Sarah Kennel, Diane Waggoner & Alice Carver-Kubik: *In The Darkroom: An Illustrated Guide to Photographic Processes Before the Digital Age* (Thames & Hudson, 2010)
David Attwood: *Sound Design* (Mitchell Beazley, 2002). The evolution of the audio industry.

Joe DeMaio: *The New Darkroom Handbook* (Focal Press, 1998)

Jonathan Cott: *Stockhausen: Conversations with the Composer* (Simon and Schuster, NY, 1973)

Karlheinz Stockhausen: *Towards a Cosmic Music* (Element Books, 1989)

Zigelbaum + Coelho at www.thedailytonic.com

¹ research shows that 63% of people in Britain are obsessed by statistics

² “I recorded individual sine waves on magnetic tape (at 76.2 cm per second), played them back two at a time using 2 tape machines, and recorded them on a 3rd recorder. I hand-measured, cut, and spliced each of these note mixtures onto white tape (using liquid acetone), before copying the resulting tape collages on top of each other to form polyphonic structures. You can use timbre in a completely hedonistic way, just to enjoy, more or less, a given sound, as in rock music” *Conversations with Stockhausen* (Simon & Schuster) 1973

³ The Victoria & Albert Museum are currently attempting to raise funds to conserve and save the manuscript of *David Copperfield* and *A Tale of Two Cities* damaged during previous conversation attempts due to the use of acidic paper. www.dickens2012.org and www.vam.ac.uk/appeals



Richard Nicholson
Debbie Sears darkroom at Metro, Clerkenwell 2006

Richard Nicholson
*Pavel 'Pascha' Koutasevich at
 Roy Snell darkroom,
 Earlsfield 2006*



RICHARD NICHOLSON

A SURVEY OF LONDON'S REMAINING PROFESSIONAL DARKROOMS 2006–2010

1979. The year my father constructed a darkroom and introduced me to photography. I was immediately entranced by the printing process and cherished the long hours spent in this dark, private space; standing in the gloom of the red safelight, slowly rocking the print tray, watching the ghost-like image reveal itself through the gently lapping developer solution. As I experimented with the many formulas and techniques detailed in my father's guidebooks, I often found the most interesting prints were the chemically stained accidents pulled from the bin at the end of a session.

The darkroom became a bolt-hole for me; a private space where I could escape from the noise of family life. As I passed through school, university and various jobs, I often sought out a darkroom to escape from the crowd. But as I honed my skills – solarizing, masking, bleaching, split-toning, hand-colouring – my prints began to attract public attention.

2006. I'm working in London as a photographer. I'm still shooting film, but digital is becoming ubiquitous. The photographic manufacturer Durst announces that it will no longer be producing enlargers. Annual sales have dropped from a peak of 107,000 units in 1979 to just a few hundred units in recent years. The darkroom has always been integral to my practice as a photographer. But for how much longer?

Once bustling hire darkrooms have become eerily quiet, and London labs are dropping like flies. Joe's Basement, Primary, Metro Soho, Keishi Colour, Ceta, Team Photographic, Sky – all gone. Polaroid has stopped making instant film and Kodak and Fuji are discontinuing one emulsion after another. The recently introduced Canon 5D camera has persuaded many diehard film photographers that digital is the

future, and those who remain unconvinced are facing clients who no longer have the budgets for film, Polaroids, clip-tests, contact-sheets and prints. The darkroom's days are numbered.

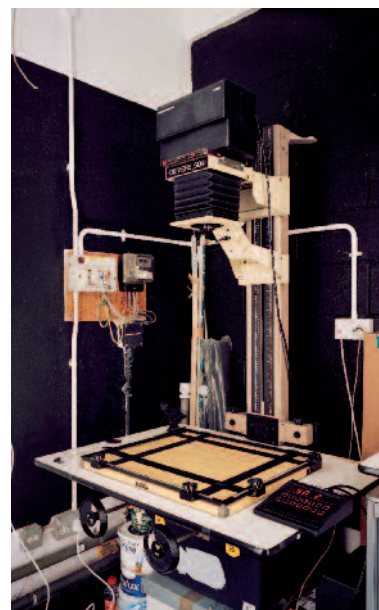
Against this backdrop, I begin to look at the darkroom in a new light. My enlarger (a handsomely engineered GEM 504) has been an invisible tool, but now it presents itself as a sad and lumpen creature in the face of extinction. With its long neck, heavy head and inviting focus handles, the thing has a human form which elicits sympathy – the surrounding matt black walls add an air of theatricality. Hearing tales of noble machines being unceremoniously dumped in skips when labs close down, I decide to document them before they all disappear.

I chose to photograph professional darkrooms because they are often shrouded in mystery; hidden behind the tidy glass facade of the lab's front desk. As a keen printer myself, I was curious to see the workspaces of the master printers; craftsmen who had spent their working lives in darkness. The spaces I discovered were often haphazard and brimming with personal details; coffee cups, CD collections, family snapshots, unpaid invoices, curious knick-knacks brought back by globe-trotting photographers. These human elements transformed what might have been a detached typology of modernist industrial design into something more intimate and nuanced.

I photographed each darkroom on large format film. Working in total darkness, I carefully painted these normally dingy spaces with a flashgun, seeking to reveal the beauty of the machinery, and shed some light on the clutter stained with the patina of time. Some of the darkrooms were busy, whilst others were neglected (all attention being given to the new inkjet printer in the adjoining corridor). Many of the darkrooms were facing imminent closure. (The one with the slogan pinned to the wall, 'I want to stay here forever', was dismantled the day after I photographed it and is currently being converted into luxury apartments.)

Many of the iconic images of recent decades were crafted in these rooms. Mike Spry's high contrast lith prints of U2 and Depeche Mode for music photographer Anton Corbijn, Peter Guest's black and white prints of the *Trainspotting* cast for portrait photographer Lorenzo Agius, or Brian Dowling's intricately masked colour prints for fashion photographer Nick Knight. Such commercial work is now routinely carried out in *Photoshop* and professional printers have had to seek out new avenues for their skills. The art market is perhaps the last bastion for traditional darkroom printing, but even this area is being taken over by digital machines – Lightjet, Lambda, and Chromira printers.

But suddenly there is a resurgence of interest in analog processes amongst younger photographers who were brought up on digital. Left cold by the clinical nature of the



Richard Nicholson
Mike Spry, Downtown Darkroom,
Southwark 2006



virtual workspace, they seek depth and authenticity via the chemical ambience of the traditional darkroom. Alternative processes from the early history of photography are being rediscovered, Polaroid instant film has been relaunched, and the craze for poorly engineered Russian and Chinese film cameras (Lomo, Holga, Diana etc) continues unabated.

I wonder at this enthusiasm. Like many committed film photographers, I experienced a belated epiphany when I finally switched to digital. My darkroom skills were easily transferred to the digital realm, and I soon discovered that Photoshop offered creative printmaking possibilities that far exceeded what I could achieve in the darkroom.

Whilst I don't miss the chemistry of the darkroom – much of it highly toxic – I do miss the aura of the red safelight and the soothing sound of running water. I miss the excited sense of performance when making a complicated print (there's no 'undo' button in the darkroom), and the physicality of dodging and burning – the manual shaping of the light. With film I had a network of contacts across London and felt embedded in the city, whereas with digital I feel disembodied.

The history of photography is young and fast moving. The darkroom era was short-lived. This collection of images represents its apotheosis.

Richard Nicholson, November 2010

I would like to thank all the printers who kindly allowed me to photograph their darkrooms.

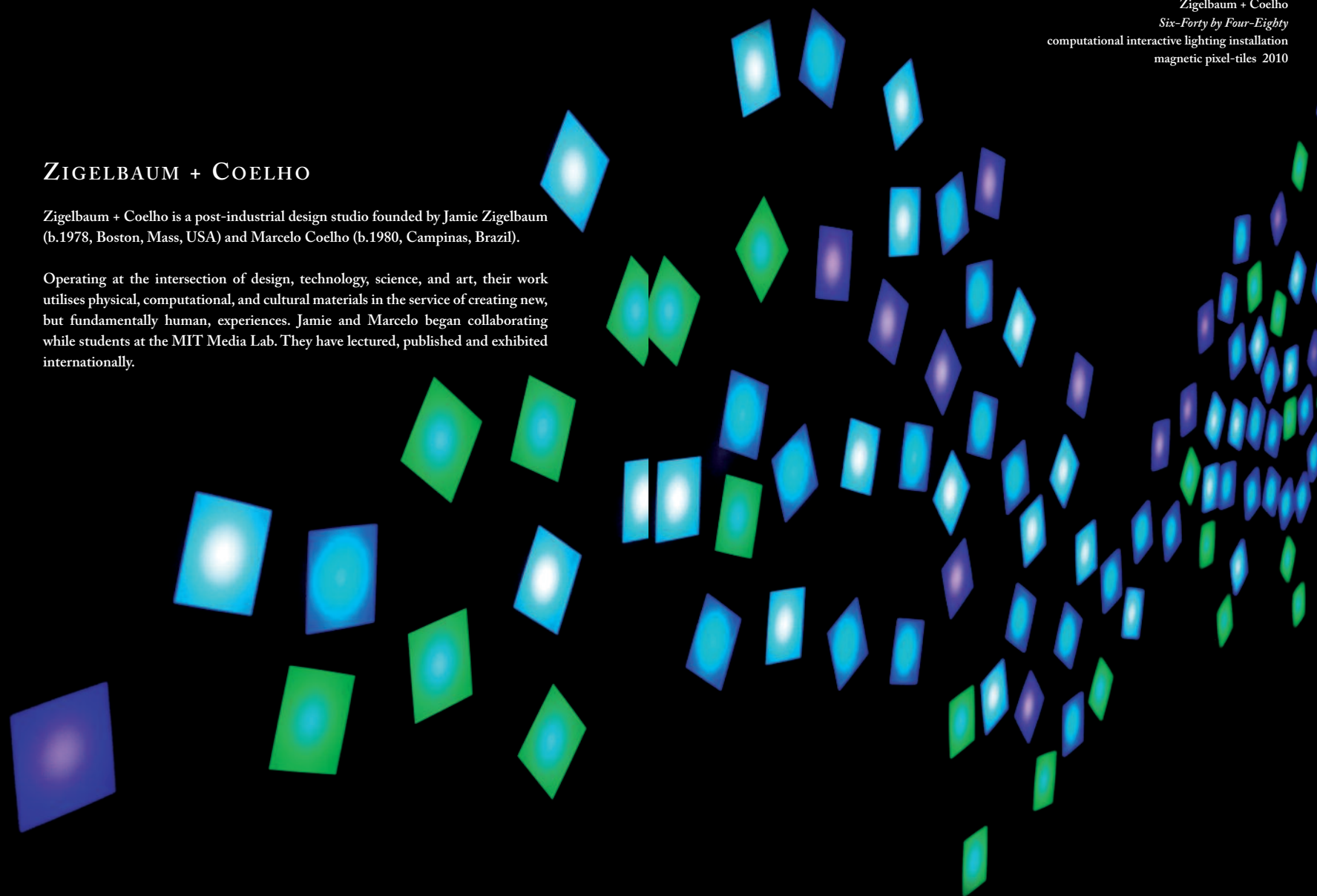
Richard Nicholson
 PREVIOUS PAGE CLOCKWISE FROM
 TOP LEFT: *Mike Crawford, Lighthouse*
Darkroom, Archway 2006; Adrian Ensor,
Grafton Way 2006; Robin Bell, Epirus
Mews, Fulham 2006; Daren Catlin, Bayeux,
Newman Street 2006

Zigelbaum + Coelho
Six-Forty by Four-Eighty
computational interactive lighting installation
magnetic pixel-tiles 2010

ZIGELBAUM + COELHO

Zigelbaum + Coelho is a post-industrial design studio founded by Jamie Zigelbaum (b.1978, Boston, Mass, USA) and Marcelo Coelho (b.1980, Campinas, Brazil).

Operating at the intersection of design, technology, science, and art, their work utilises physical, computational, and cultural materials in the service of creating new, but fundamentally human, experiences. Jamie and Marcelo began collaborating while students at the MIT Media Lab. They have lectured, published and exhibited internationally.



JAMIE ZIEGELBAUM

Jamie Ziegelbaum builds and studies next generation computer interfaces, augmented objects, and human experiences. His work is multidisciplinary, straddling design, human-computer interaction, media theory, and cognitive science.

Jamie received a Master of Science degree from the MIT Media Lab in 2008 working in the Tangible Media Group. Before coming to the Media Lab, Jamie received a Bachelor of Arts in 2006 from Tufts University where he majored in Human-Computer Interaction. For his undergraduate thesis he built the Tangible Video Editor (TVE), a physical interface for collaboratively editing video.

Jamie has exhibited and published internationally at human-computer interaction conferences and interactive arts festivals such as TEI, CHI, Ars Electronica, and ISEA. In 2010 he chaired the ACM's international conference on Tangible, Embedded, and Embodied Interaction. He works and lives in Los Angeles.

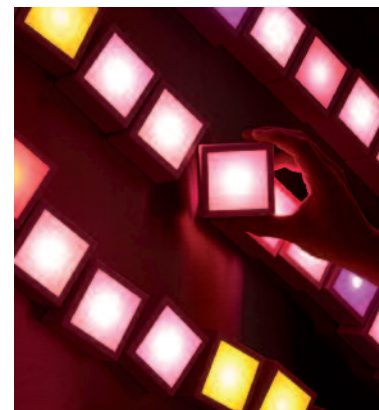
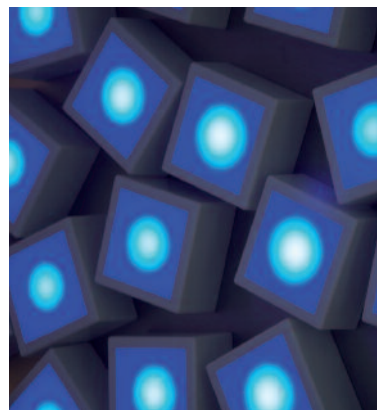
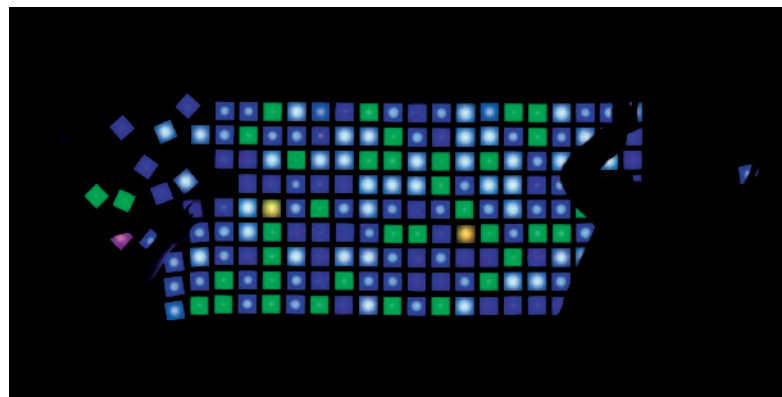
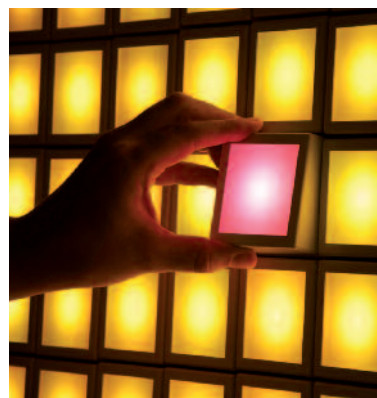
MARCELO COELHO

Marcelo Coelho is a designer and researcher whose work dwells in the intersection of human-computer interaction, materials science and design. He is an inventor of paper computers, shape changing composites, interactive garments, and edible circuits.

Coelho holds a BFA in Computation Arts, with highest honors, from Concordia University in Montreal, where he was also a Research Partner at XS Labs developing wearable technology and interactive textiles. He is currently based in Cambridge, MA, where he is a PhD candidate at the MIT Media Lab.

His work has been exhibited internationally, at Ars Electronica, Societe des arts technologiques, Galerie Sequence, Digifest, Dutch Design Week, Collision Collective and Seamless Fashion Show. He has won several grants and awards, including MIT Council for the Arts Grant, VAV production grant, US National Congress on Computational Mechanics Award, Golden Key Visual & Performing Arts Achievement Award, and CHI Best Video Golden Mouse Award.

Academically, Coelho's research has been widely published in books, popular press and academic conferences such as SIGGRAPH, ISEA, ISWC, Ubicomp, TEI and CHI. He has given numerous classes, workshops and public lectures at MIT, Fordham University, Emily Carr University of Art and Design, The Danish Royal Academy of Fine Arts, Banff New Media Institute and Canada's National Research Council.



Photos by James Harris

JAMIE ZIGELBAUM:

What does the word ANALOG mean to you?

It denotes a continuous signal: a metonym for our world of bountiful errors at the resolution of human sensorium. Also a similar object is an analog, which is interesting because an object that is similar to another is not exactly the same.

What does the word DIGITAL mean to you?

It denotes a discrete signal: the human-wrought, error correcting technology that enables abstract, perfect communication. Also one's hands are digital, which is interesting because digital material is often so far removed from one's hands.

Do these words have any philosophical or spiritual meaning or sense at all? Or are they just simply descriptive of format and/or method?

Interestingly these two words comprise an Ouroboros, or perhaps an infinite Matryoshka doll. Below the depth of our perception the stuff of the analog world functions quite digitally: DNA enables sending complex signals with low error through time and space; subatomic materials can appear to function with discrete characteristics. Beyond the grip of our cognition digital systems function as imperfectly as analog ones: software bugs are impossible to eradicate; CDs mold in heaps. I'd say that's pretty meaningful.

Roughly how many hours a day would you say you spend online?

All of them. With the advent of external cognitive coprocessors like my iPhone there is no more offline. Even when the battery dies my leg still vibrates.

Are you at all concerned about 'archiving' in terms of an archive being an 'indestructible' force in the analog world while it is maybe more of a 'disappearing' easily-deleted, much more unstable one in the digital world?

I'd say archives are just as vulnerable in the analog world and the digital world. Locks can be picked and passwords can be phished. Neither of those facts have concerned me much.

Do you feel there may be a conflict between Nature – the Natural World – and our digitally created human virtual world?

Not at all. Our digital reality is as much reality as anything else, and all of it is natural. Technology is not something separate from us – some agent of mysterious intent. Instead it is us: laptop varieties are like phenotypes. There is conflict though, but all conflict is in our heads, isn't it?

What comes after digital?

Analog, then digital, then analog, then digital, then analog, then...

MARCELO COELHO:

What does the word ANALOG mean to you?

It means continuity and the full extent of what our unmediated senses can perceive and make sense of, unfiltered from incongruities and noises.

What does the word DIGITAL mean to you?

Digital to me means the quantification of this analog world. Parsing, sampling and rejecting its incongruities and noises to extract pure information. Or as Claude Shannon puts it "information is the resolution of uncertainty".

Of course, analog and digital in some ways are just concepts that exist in relation to each other. What defines a traditional photograph as analog for instance is solely our inability to capture, process and reproduce all the information it contains without any losses.

Do these words have any philosophical or spiritual meaning or sense at all. Or are they just simply descriptive of format and/or method?

They are both descriptive of a methodology that allows computers to absorb the data we encounter in the world, process it and spit it back out, whether this data is in the form of electrical signals, matter, light, heat etc. This ability to encompass almost all aspects of life is an excellent material for philosophical discussions and quite beautiful, I have to admit.

Roughly how many hours a day would you say you spend online?

Consciously, 24 hours/day. Unconsciously, twice as much.

Are you at all concerned about 'archiving' in terms of an archive being an 'indestructible' force in the analog world while it is maybe more of a 'disappearing' easily-deleted, much more unstable one in the digital world?

No, and I would argue the complete opposite. An analog archive is by its own nature destructible. Atoms decay, fade away with time and sunlight. Libraries burn down. Digital information, on the other hand, is truly indestructible and detached from the substrate where it lives. Information can be copied – and even auto-correct – as we infinitely move it through the physical vessels we will use to carry it in the future.

Do you feel there may be a conflict between Nature – the Natural World – and our digitally created human virtual world?

No, our digitally created world is only one tiny speckle of the large natural world we inhabit. The more we learn about nature, the more it reveals its underlying computational essence.

What comes after digital?

Analog. (The digital has already passed).

CLARE MITTEN

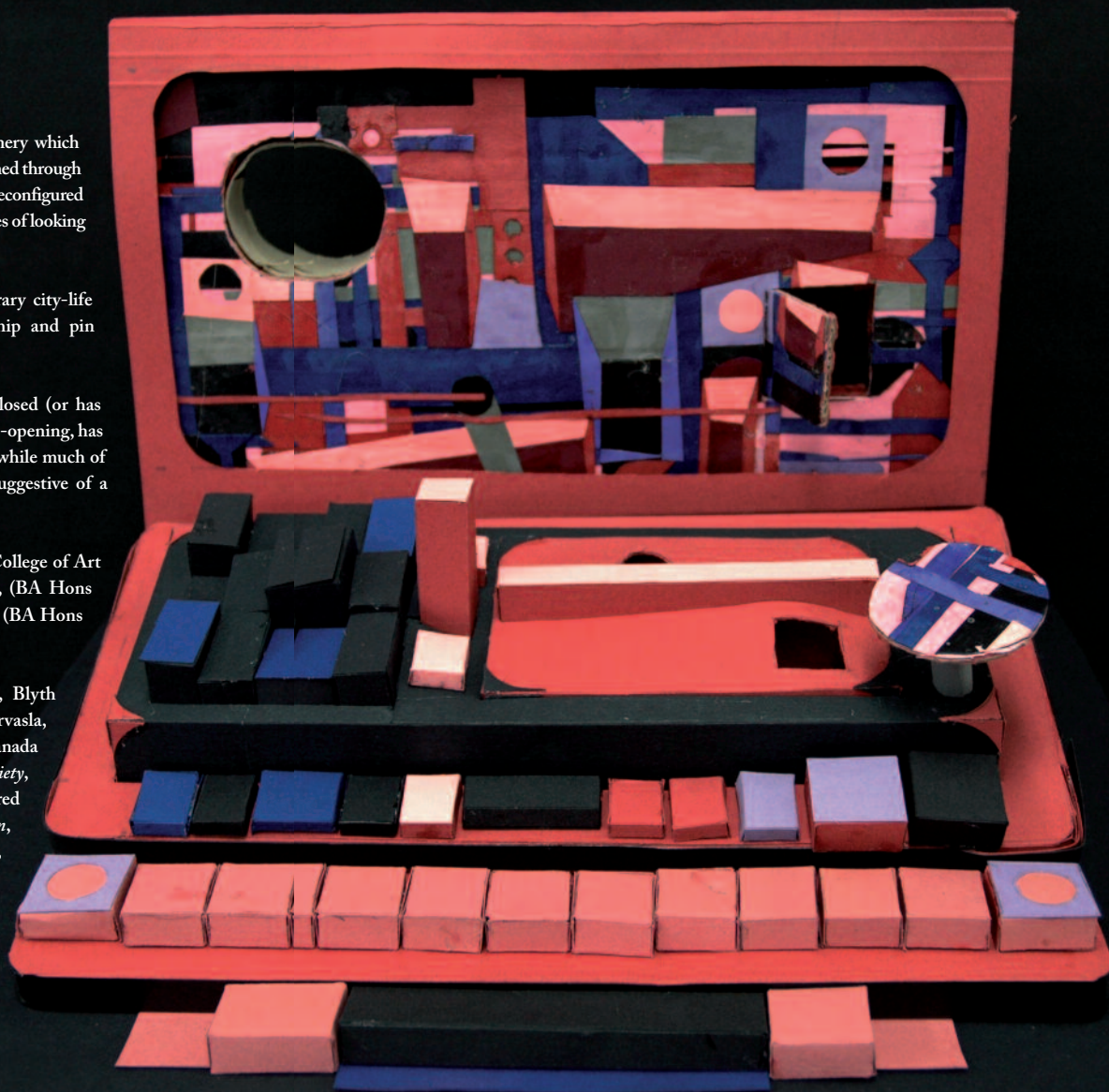
Clare Mitten's objects constructed from packaging and stationery which function as three-dimensional sketches for drawing, are transformed through flattening, editing and error. When flipped back to 3D, the reconfigured versions are a strange hybrid – a synthesis of the multiple processes of looking and understanding, suggestive of other disparate references.

The *Aztech* series includes high-tech gadgets of contemporary city-life (laptops, mobile phones, touch-screens and handhelds, chip and pin machine, clocks and watches).

In an analogy to painting, it is as if the laptop has been closed (or has collapsed and folded) while the board was still wet, which on re-opening, has left a print – in part mirroring elements of the 3D keyboard, while much of the visual data has been scrambled in translation, and is suggestive of a patterned construction site and circuitry.

Clare Mitten (born 1972, Gloucester) studied at the Royal College of Art (MA Painting, 2004 - 2006); University of Gloucestershire, (BA Hons Fine Art Painting, 1998 - 2001) and the University of Sussex (BA Hons History of Art, 1990-1994).

Selected Exhibitions and Awards include *Double Trouble*, Blyth Gallery, London, 2010; *Artisterium* (British Council) Karvasla, Tbilisi, Georgia, 2010; *A Curious Context*, Lobby, One Canada Square, Canary Wharf, 2010; *Fault Line: Art in the Age of Anxiety*, The Nunnery, London, 2009; *Breaking New*, Five Hundred Dollars Gallery, London, 2009; *What Goes Up Must Come Down*, Madame Lillies, London, 2008; *Kaleidoscope*, Blyth Gallery, London, 2007; *Eye Chamber*, London, 2006; *Generation*, Royal College of Art, London, 2006; *The Drawing Room*, Royal West of England Academy, Bristol, 2006. Helen Chadwick Memorial Prize, Royal College of Art (2005). Mitten is a Jerwood Painting Fellow 2010 and will exhibit work at Jerwood Space in May 2011.

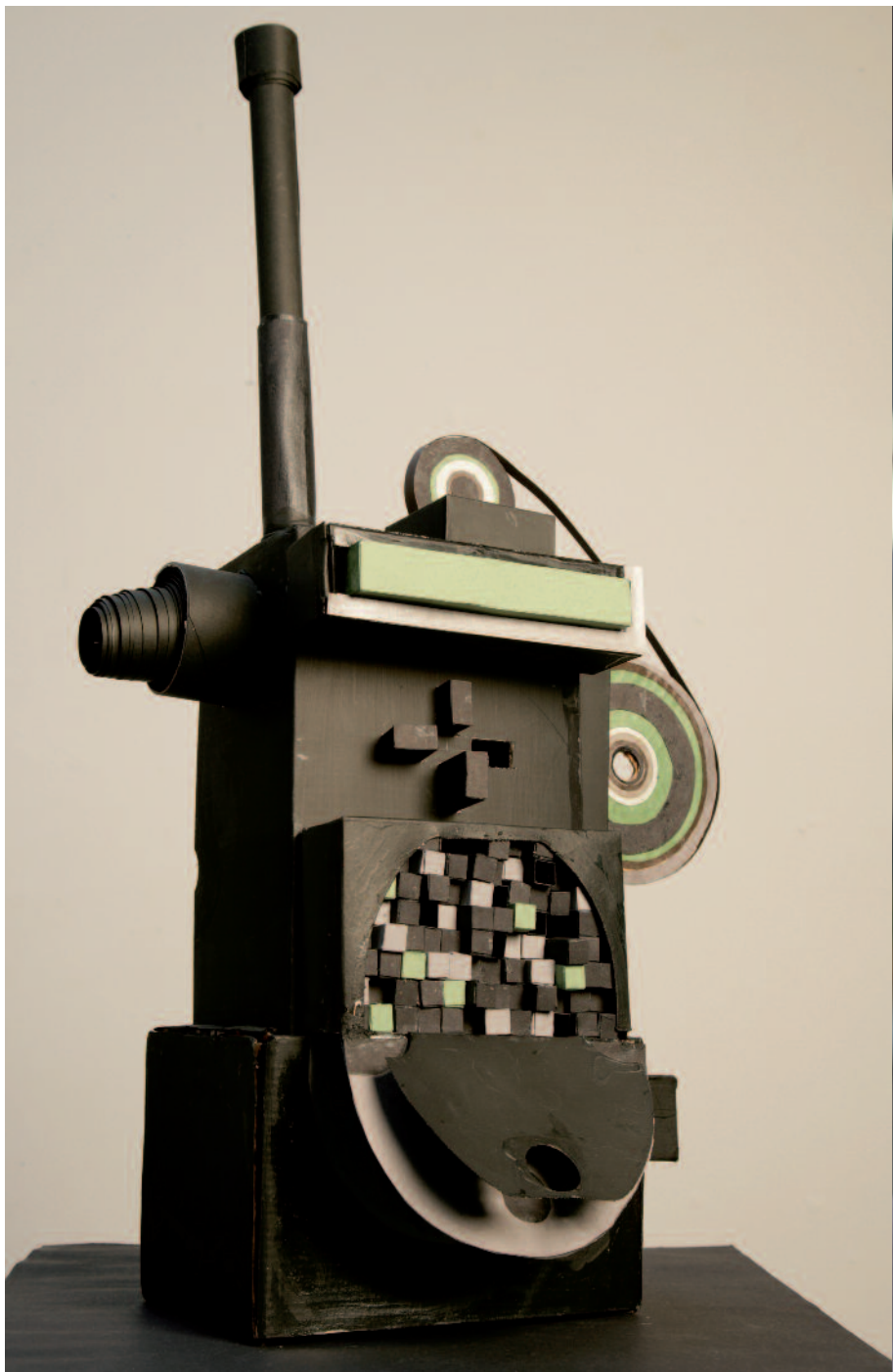


Clare Mitten

Aztech Toppal (Red)

paper folders, paper, glue. 34 x 28 x 30 cm 2010

From the *Aztech Series A Mock World Of Technological Innovation*



Clare Mitten
Tablet
paper folders, 24 x 11 x 10cm 2010
OPPOSITE: *Backup*
paper folders, paper, glue
70 x 36 x 27 cm 2010

KITTY, DAISY & LEWIS

Kitty, Daisy & Lewis are a three-piece band comprising the teenage siblings of the Durham family. Their music is influenced heavily by R&B, swing, jump blues, country and western, blues, Hawaiian and rock 'n' roll. They are all multi-instrumentalists playing guitar, piano, banjo, lapsteel guitar, harmonica, double bass, ukulele, drums, trombone, xylophone and accordion between them.

Kitty Durham, at 17 the youngest of the group, primarily sings and plays drums, harmonica, ukulele, banjo, trombone and guitar. Daisy (22) the eldest, sings and plays drums, piano, accordion and xylophone. Lewis Durham (20) is the middle child who sings and plays guitar, piano, banjo, lapsteel and drums. He collects and DJ's 78rpm records and has built a home studio consisting of 1940s and 1950s recording equipment such as 8-track tape machines and vintage BBC and RCA microphones. Kitty, Daisy & Lewis do not use computers or any digital format during the recording process.

The band are signed to the *Sunday Best* record label who released their second single *Mean Son Of A Gun*, a song originally cut by Johnny Horton in the 50s, with the B-side *Ooo Wee* which they first heard on a 78rpm record sung by swing king Louis Jordan. This was released on 45rpm, CD and ltd edition 78rpm vinyl. The tracks were recorded at home. The vinyl was also cut by Lewis using his own equipment.

Tot Taylor met Lewis Durham at the band's studio in North London, 24 September 2010

"There's analogue and there's *analogue*" says Lewis Durham, 'Young Elvis' looker, songwriter/producer and technical whiz on all things sonic, in particular Analogue.

Lewis is twenty. He played his first gig aged ten, then as now using his favoured vintage analogue equipment for both performing live and recording in the studio (built from scratch by himself and his father Graeme, one of London's most in-demand disc-cutting engineers).

TT So what does the 'A' word mean to you?

LD *"Something that happens in 'real time' and you can see it, feel it and it exists. As opposed to digital, which isn't really there. If you have a CD or memory card it's not really there. If you were handed a record you can see the music actually in the grooves.*

I don't dislike digital though. It works for a lot of things like film... storage. It works – but analogue surpasses it. If you play a digital CD you're converting the music back to analogue anyway. Analogue seems a lot more human."

TT In your view, why was it that the music format changed from analogue to digital in the first place?

LD *"Most of it is to do with economics. Times move on, and new tech comes in, though digital records have actually been around since the 1940's. Those recordings are okay but not as good as the analogue records of that era, like mobile phone techno has also been around since the 30s, at least. A friend of mine made some digital recordings in the 60s, the machines looked like video recorders. Ampex manufactured them.*

Economically, for someone to buy a tape-recorder, was not something you could really afford, the multi-track Studer machines (in the '50s and '60s) then cost the price of a house. It was expensive, they needed to be maintained – almost daily, needed to be housed in a big room, hence you had big studios."

TT And a big bill...

LD *"Testing the valves, re-aligning the tape, you can imagine the expense. The disc-cutting machines cost \$40,000 even in the '30s. The computers you use now are not meant to be fixed. It's all just pressed as one thing, it breaks, you replace it, buy another, you don't fix it. That's a big difference. Suddenly you don't need a maintenance guy. The money and time that's been spent on the gear in our studio is phenomenal. I don't recommend it."*

TT The band seemed to become known very quickly. How did it all start?

LD *"I started by taking things apart, finding out how they worked. I bought an old disc-cutting lathe of my own and cut acetates (tin-like test records) for my friends at school, of their rap songs.*

We were playing as a band even then, but just as a family – as a natural thing for us to do. No career plan or anything. The first gig we ever did, I was ten years old. In terms of equipment, our first studio recording machine was a Studer 8-track. Our first console/mixing desk was made



Kitty, Daisy & Lewis in the studio



from an old wardrobe door. Basically a wardrobe door with knobs on it. When we did our first professional gig a couple of years back, Daisy was 12. We got asked by Barry Stillwell to do the Tapestry Festival in north London and he asked us what the name of the band was, and we didn't have one. So it was just our names; Kitty, Daisy & Lewis, and that was it. That was how it started. We did some recording at home, and suddenly we were on Radio 1, and like, all over the place. We heard Chris, of Coldplay, talking about us on the radio, and then got a call from Coldplay's management asking if we would like to do the upcoming US Tour (Autumn 2009)."

TT The studio we're sitting in looks like something between a 'Museum of Sonic Possibilities' and a kind of installation of unfathomable machines...

LD *"The tape-machine you're leaning on is another Ampex 8-track, something of a legend itself. The machine Aretha Franklin and Ray Charles recorded on from Arif Mardin's Atlantic Studios on 58th St, New York. There were only three ever made. One for Les Paul, one for the US government and this one for Atlantic."*

We also have an Ampex 300-3, the machine used by Elvis Presley at RCA Studios, NY. That was chucked out when they flattened RCA (in 1990) to turn the lot into a car park. It went from RCA to Muscle Shoals – now it's sitting in the shed outside in Camden."

Kitty, Daisy & Lewis are joined both in the studio and onstage by mother and bass player Ingrid (Weiss), former drummer in near-legendary post-punk radicals The Raincoats, and father Graeme, highly respected disc-mastering engineer with numerous credits including Grace Jones, Bob Marley, U2, Lee Scratch Perry and Groove Armada.

The band are so virtuously analogue they don't even have a website. For more you'll have to go to their record company: www.SUNDAYBEST.net

FURTHER LISTENING:

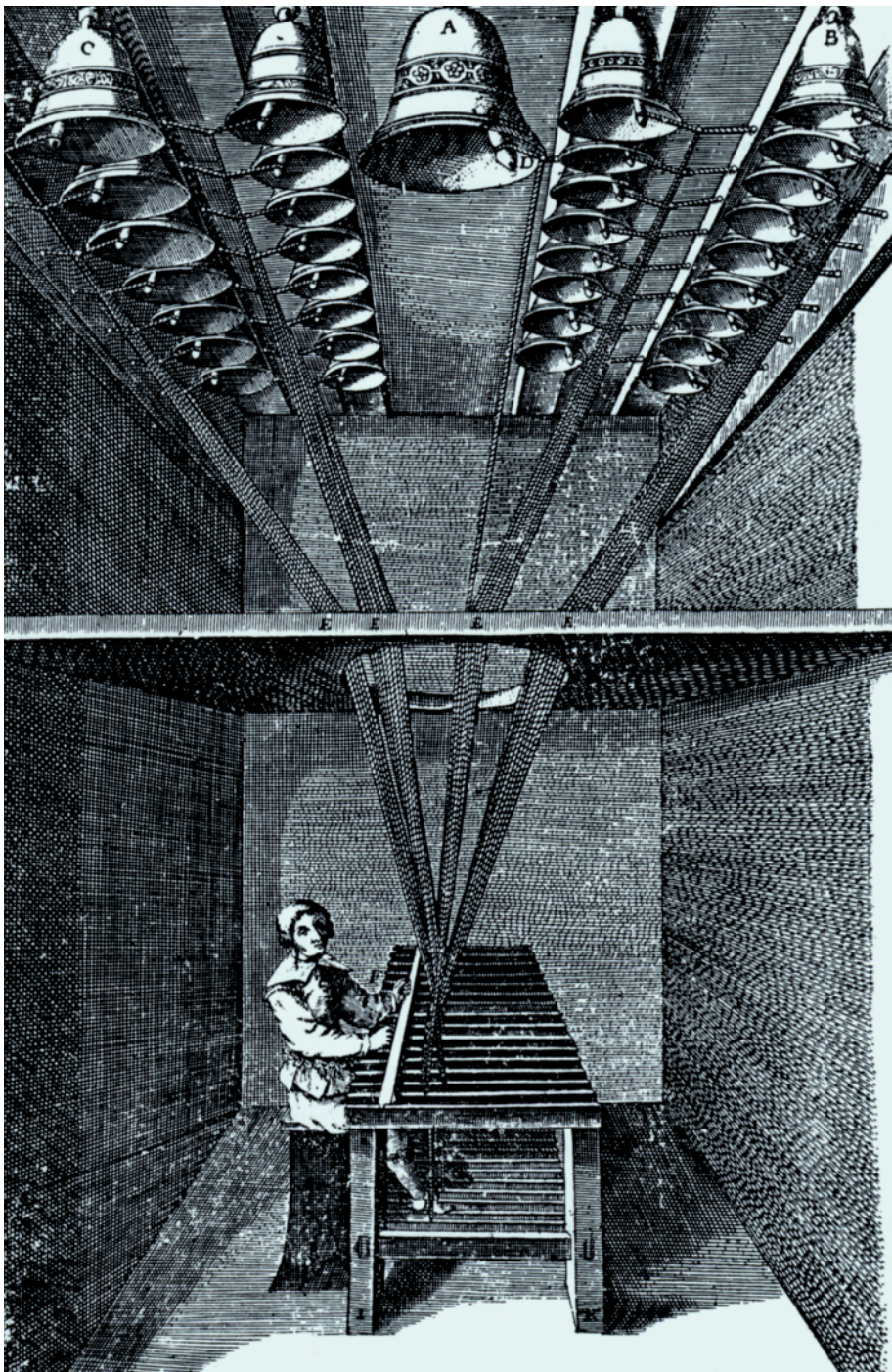
Kitty, Daisy & Lewis: *A-Z: The Roots of Rock'n'Roll* 2007

Kitty, Daisy & Lewis 2008

A new album is currently being recorded.



OPPOSITE: Speaker display, *High Fidelity* magazine cover, Los Angeles, California 1960



UNFATHOMABLE INEXPLICABLES

QUITE 'ANALOGUE'

Teapot
Cardigan
Stained glass window
Farmer's Market
Big Ben

SOMEHOW 'DIGITAL'

Firework night
Bridget Riley
Traffic-lights
Bungalow
Cat's eyes
The night sky



Ron Arad
re-inforced Concrete Stereo, limited edition 1984
OPPOSITE: Carillon of the church of
Notre-Dame at Anvers

Analog curated by Tot Taylor
 Produced by Virginia Damtsa and Robin Mann
 Book edited by Tot Taylor
 Additional book edit by Kristina Lindell
 Design by Julian Balme at Vegas Design

OTHER RIFLEMAKER PUBLICATIONS

Josephine King *Life So Far*, text by Adrian Dannatt, Josephine King 2010

Leah Gordon *The Invisibles*, text by Simryn Gill 2010

Stuart Pearson Wright *I Remember You*, text by Adam Foulds, Deborah Warner,

David Thewlis and Keira Knightley 2010

Alice Anderson's *Time Reversal*, text by Marina Warner, Maud Jacquin and

Louise Gray 2010

Artists Anonymous *Lucifer over London*, text by JJ Charlesworth 2009

Anya Niemi *Porcelain* 2009

José-Maria Cano *La Tauromaquia*, text by A L Kennedy 2009

Voodoo: Hoochie-Coochie and the creative Spirit, edited by Tot Taylor with text by
 Marina Warner and Zina Saro-Wiwa 2008

Liliane Lijn *Stardust* 2008

Francesca Lowe & Alasdair Gray *Terminus*, unpublished short story by

Alasdair Gray, text by Sarah Kent 2007

Chosil Kil *Living With Andis*, co-published with

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Jamie Shovlin *Lustfaust*, text by Jamie Shovlin 2006

Gavin Turk *Me As Him*, text by Tot Taylor 2007

Riflemaker becomes Indica by Tot Taylor, with

contributions from Barry Miles & John Dunbar 2006

William S. Burroughs *The Unseen Art of William S. Burroughs*,

with text by Stephen Lowe and James Grauerholz 2006

Jamie Shovlin *Fontana Modern Masters*, text by Martin Holman 2005

Christopher Bucklow *If This Be Not I* by Christopher Bucklow 2004

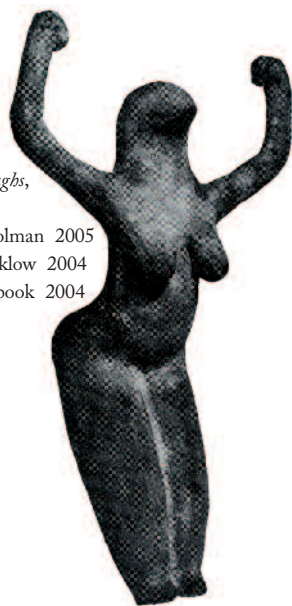
Marta Marcé *Playroom*, reproduction of the artist's sketchbook 2004

Jamie Shovlin *Naomi V. Jelish* 2004

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