



A cut and a slice is there any question when a cut and a slice are just the same.

A cut and a slice has no particular exchange it has such a strange exception to all that which is different.

A cut and only slice, only a cut and only a slice, the remains of a taste may remain and tasting is accurate.

A cut and an occasion, a slice and a substitute a single hurry and a circumstance that shows that, all this is so reasonable when every thing is clear.

— Gertrude Stein, *What Happened: A Play* (1922)

Seeing is a matter of surfaces. It's for this reason that both vision and representation are continually haunted by the problem of *insides* and *outsides* – the relationship between the external and what lies *within*. A merely perceptual matter? If only. It has crept on us: the ocular paradigm of post-Cartesian metaphysics gradually sublimed this pervasive visual anxiety, creating in the process our basic metaphors for critical inquiry itself: 'superficial' propositions, 'trenchant' analysis, the joys of insight.

With these matters in mind (and a whetted blade in hand), the editors of *Cabinet* magazine here take up THE SLICE, that clean incision that forever links the sharp knife to the keen eye. Moving across historical moments and disparate fields, this exhibition examines the peculiar traditions that link visibility to the swift saw. From the cutaway view to the geometry of projection, from the microtome to the CAT-Scan, from the surgeon's scalpel to the sadist's guillotine, the slice can reveal

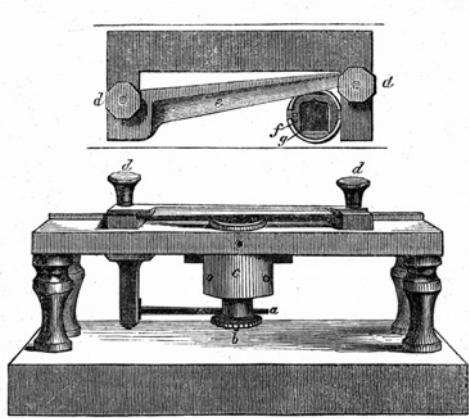
a secret order, spill lurid innards and open new views. The convention of the architectural cross-section here finds its parallel in the physical sectioning of histological specimens. The pleasures of the Parisian voyeur meet the dutiful labours of the lumberjack. The earth itself, like an onion, reveals its hidden structure. So take a look. But remember, cutting to see is an object lesson in the violence of vision. The world looks different when you wield an edge.

THE SLICE is a laboratory for a future themed issue of *Cabinet*, a quarterly non-for-profit magazine based in New York. Now in its tenth year, *Cabinet* embraces and promotes the most expansive definition of 'culture' possible, one that includes both the quotidian and the extraordinary, in order to foster an ethic of curiosity about the world we have made and inhabit.

Exhibition curated by D. Graham Burnett and Christopher Turner  
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## THE THIN FILM: VANNEVAR BUSH AND VISION BY INCISION

D Graham Burnett



visualisation techniques in the biological sciences.<sup>1</sup> He called it an 'Automatic Microtome', and his device – a dead end, finally, in the history of technology, but a lovely and suggestive dead end indeed – will serve as a choice occasion for a moment's reflection on the charged intersections of the blade and the eye.

A word about microtomes, which had been around for more than a century by the time Bush began to think about how they might be reinvented. At its heart, a *micro-tome* is nothing more than its name implies: a *fine-cutter*, a cobbling together of the Greek words for 'small' and 'cut'. The term itself seems to have been coined in 1839 by the French microscopist Charles Chevalier, but finely machined devices for preparing transparently thin shavings of specimens can be traced back to the mid-eighteenth century at least. The technical rationale for such mechanisms is clear enough: the higher magnification generated by increasingly sophisticated compound microscopes in this period placed a premium on powerful illumination; it is very difficult to get adequate light on an opaque specimen placed vanishingly close to a strong objective lens. Much better to project the light *through* the specimen. Not only does this make it easier to concentrate and direct the light through the viewing tube, it also permits the close examination of fine inner structures of the tissue itself. But all this hinges on sectioning the specimen into sufficiently thin slabs – thin enough to be translucent, and precise enough to minimise depth of field problems during focusing. Hand cutting will only get you so far on this, especially with rigid or messy materials.

The earliest documented microtomes were in fact designed to cut whisper thin chips of wood. It had been plant tissue, of course, that had led the earliest microscopists to coin the term 'cell' back in the seventeenth century – a word meant to liken these boxy microscopic structures to the floorplan of a monastery. One of the very greatest of the early microtome makers was, in fact, a 'common carpenter of Ipswich' (surname Custace) who jealously defended the secret to his homemade 'cutting engine' – which was doubtless a

delicate modification of the familiar carpenter's plane. Interestingly, a set of six of his mounted specimens traded for more than a common microscope circa 1800. If you were a gentleman, and you owned one of these bloody drawing-room conversation doo-daads, you wanted to make sure you had something interesting to look at with it. Something to show the ladies. And that basically required a microtome, which you probably did *not* have – and couldn't have made work if you did.

Improvements in screw-cutting technologies in the early nineteenth century (linked to the increasingly large and sophisticated industry producing chronometers and navigational instruments) eventually gave rise to commercial microtomes that allowed a user to advance the specimen onto the cutting blade with great control, measuring out the slice in micrometer increments. These devices – made by instrument makers in England and Germany in particular – stimulated powerful new techniques in the biological sciences. Combined with the development of chemical stains and embedding procedures (fixing a soft specimen in a block of wax or jelly to improve slice quality), reliable microtome sectioning procedures allowed a new generation of medical doctors and anatomists in the late-nineteenth century to make major discoveries in pathology, histology and embryology. From precise sequential slices these investigators could reconstruct complex three-dimensional structures with geometrical precision. It has even been argued that certain mechanistic approaches to morphology and development in this period can be understood to reflect the predilections of men who spent much of their lives shaving reality into two-dimensional planes – and plotting the results on graph paper.<sup>2</sup> Eventually fancy rotary microtomes were even rigged up – machines that worked a little like a modern deli-slicer, automatically advancing the blade (or the sausage) on each pass by a preset interval. A skilled user could tease from one of these devices a long ribbon of serial sections, each less than a cell in thickness. Such strips were a pain to manage (they had to be floated onto glass slides and allowed to relax to flatness before being fixed), but they were a revela-

tion – nothing less than an unspooling of the tightly wrapped world of microscopic forms.

All this was handcraft. Knack. Technique. *Skill*. And I can say this with some confidence. Back when I still thought I wanted to be a doctor, I worked for a summer in an immunology lab, where I killed many hundreds of white mice and removed their pancreases. I then froze these sad little blood-sacks into tiny ice-cubes in long trays – all this being preparation for lowering them, one at a time, onto the stage of a refrigerator-sized *cryotome* (basically a microtome built into a freezer). The point then was to use a delicate brush and a needle and a little touch to crank out beautiful, long ribbons of paraffin-ice, each with its little translucent smudge of pancreas. I was not very good at it. The project stagnated. It is a testimony either to the difficulty of the technique, or to my troubled youth, that I eventually nicked the extra cryotome knife, for which I made a handsome inlaid handle in the woodshop. I thought there was something grand about owning the sharpest street blade in West Philadelphia. It was not, however, convenient to carry, being seven inches long and shaped like a blocky candy-bar. Nice handle, though.

Which brings us back to Vannevar Bush. His '*automatic* microtome' represented a prescient bid to get punks like me out of the whole process. What he and his colleagues had designed was a microtome that – in principle – obviated all the fussy lab-tech work with those delicate ribbons. Instead, trading on the machinery at the heart of a movie-camera, his device fed a ribbon of modified 35mm Kodak film stock through special tractor feeds down onto the face of the specimen. The microtome blade, working a little like a shutter, then shaved off a micro-fine *tranche* which adhered to the emulsion as it passed by. Presto! Turn the crank and the three-dimensional world becomes a *moving picture*. Think of it as the Hollywood version of Edwin A Abbot's Victorian romance of n-dimensional space, *Flatland*.

Bush loved the idea of decomposing physical objects directly onto film, section by sequential section. In the first place, it made it possible to imagine copying the

In the late spring of 1952 the most powerful scientist in the world, Vannevar Bush, submitted a short paper to *Science*, the American journal of record for investigators of nature. Little surprise there. By the early 1950s Bush had been generating significant scientific results in half a dozen fields for some 30 years. In the 1920s his forays into radio signal amplification had led to the founding of the Raytheon Corporation (soon a leading defence contractor), and made him a very wealthy man. During the war his administrative gifts, technical savvy and diplomatic futurism propelled him to the helm of the Manhattan Project, and positioned him to serve as the *de facto* architect of American Cold-War science policy. It has been calculated that in the 1940s something like two-thirds of US physicists were working either directly or indirectly for Vannevar Bush, who is now most often remembered for his visionary *Memmex* project – a mechanical, extendable, configurable, microfilm-based cognitive prosthetic frequently cited as a forerunner of the World Wide Web.

So what was this titan of power/knowledge working on in the early 1950s? It turns out that he was tinkering with a most improbable contraption. The published version of the *Science* paper, which ran in mid-June 1952, lovingly detailed Bush's progress on a finicky mechanical cutting tool that he hoped would revolutionise

originals by film-transfer technologies. Not only that, all the staining and fixing could occur in the tins and baths used for commercial film development. And then, of course, there was the possibility of actually *viewing* such films through a projector: one would literally tour, say, an embryo, head to toe, slice by slice – an animated flip-book of the body. In full colour. Here was the body as film.<sup>3</sup>

This is not the place to play out the tissue of suggestive allusions (Eadweard Muybridge's time-and-motion studies, Duchamp's *infra-mince*, the notorious 'baloney-man' of Chicago's Museum of Science and Industry, the 'Visible Human Project', Justine Cooper's MRI sculpture *Rapt*, etc, etc). For that matter, I don't even know what became of Bush's prototype. He was still working on improvements to the device in 1955, and there are several files of related papers in his manuscript collections at the Library of Congress. The original machine and/or some of his films may even survive. What is certain, however, is that Vannevar pushed the fantasy of 'vision by incision' in a radical way by tying the movie camera to the microtome: here were *slices of life* as never before.

And, perhaps, in the end, as never again.

## Notes

Image: Wellcome Library, London Microtome of the type used by Quekett. From: A practical treatise on the microscope. By: John Thomas Quekett. Published: H. Baillière London 1855

1 V Bush, 'Automatic Microtome', *Science* 115 (13 June 1952), pp 649–52.

2 For one such argument, consider Nick Hopwood's interesting paper on Wilhelm His, 'Giving Body to Embryos: Modelling, Mechanism and the Microtome in Late Nineteenth-Century Anatomy', *Isis* 90 (1999), pp 462–96.

3 In the course of the research for this show, I stumbled on a fascinating precursor of this kind of projective anatomy. In the late 1870s an American doctor by the name of Carl Seiler toured the northeast showing the results of a large 'immersion microtome' of his own invention. This apparently allowed him to make fine sections of relatively large bits of the body: 'a human larynx, a fetal foot, a cat's kidney'. He mounted these in such a way as to be able to use them as slides in a modified magic lantern – projecting the stained slices onto a screen at medical gatherings.

*A sudden slice changes the whole plate, it does so suddenly.*

Gertrude Stein, *Tender Buttons*, 1914

*I should like to let you know how important sliced bread is to the morale and sane-ness of a household. My husband and four children are all in a rush during and after breakfast. Without ready-sliced bread I must do the slicing for toast – two pieces for each one – that's ten. For their lunches I must cut by hand at least twenty slices, for two sandwiches apiece. Afterward I make my own toast. Twenty-two slices of bread to be cut in a hurry!*

Letter from 'A Distraught Housewife', *The New York Times*, 1943

*The rational reconstructionist ontology may be sketched thus: Science is a body of knowledge; or at a given stage, the synchronous time-slice of this body of knowledge.*

Marx W Wartofsky, 'The relationship between philosophy of science and history of science', *Essays in Memory of Imre Lakatos*, 1976

*The measuring of time produces anxiety when it serves to assign us social tasks, but it makes us feel safe when it substantialises time and cuts it into slices like an object of consumption.*

Jean Baudrillard, *The System of Objects*, 1968

*There being no question of a slice upon which the further question of where and how to cut it does not wait, the office of method, the idea of choice and comparison, have occupied the ground from the first. This makes clear, to a moment's reflection, that there can be no such thing as an amorphous slice, and that any waving aside of inquiry as to the sense and value of a chunk of matter has to reckon with the simple truth of its having been born of naught else but measured excision.*

Henry James, 'The New Novel', 1914

## BLIND SIGHT: SLICING EYES TO RESTORE VISION

Christopher Turner



On 8 April 1747, Monsieur Garion, a blind wig maker, sat on a stool in nervous anticipation. A man standing behind him held his head steady, one hand firmly under Garion's chin, the other peeling back the upper lid of his eye. Surgeon Jacques Daviel sat in front of them on a slightly higher chair and held down Garion's lower lid. Steadying his elbow on his knee, Daviel brought a sharp triangular-shaped knife up to the wig maker's clouded eye and, without anaesthetic, pierced the cornea. Using another curved cutting knife and convex scissors this wound was opened to create and lift a half-moon-shaped flap. A sharp needle was applied directly to the lens; any adhesions between it and the iris were severed with a blunt spatula. As fluid flowed out of the eye, gentle pressure was applied to the lower lid to help dislodge and remove the patient's cataract.

This was the first extracapsular cataract extraction operation on record. It was a seemingly miraculous procedure: when his bandages were removed after a week of bed rest, Garion could see again. Over the next 40 years, Daviel performed 206 such operations, 182 of which he claimed were successful – impressive odds for the time. After he explained his method to the Académie Royale de Chirurgie in 1753, other surgeons followed suit. Over the next century, hundreds of different medical knives were designed to try and

create smoother incisions, which would speed healing and minimise the chance of infection (a wide variety of these instruments are in the Wellcome collection). Surgeons developed their own signature cuts, and ophthalmology illustrations show a variety of these marks, scarred onto the cornea like runic signs.

Eighteenth-century philosophers were fascinated by blindness – Locke, Leibnitz, La Mettrie, Diderot and Voltaire were all interested in the intellectual problems thrown up by the new science, or art, of cataract operations. The blind man restored to sight became a paradigmatic figure in enlightenment thinking. 'To rediscover the permanent truth of this bright, distant, open naivety of the gaze' was, according to Michel Foucault, one of the 'great mythical experiences on which the philosophy of the eighteenth century had wished to base its beginning.'

In 1688 the Irish scientist and politician William Molyneux, whose wife lost her sight in the first year of their marriage, posed a question to John Locke: would a man born blind, who has learnt to distinguish objects by touch, be able to distinguish a globe and a cube by sight alone if he were ever cured? After Locke wrote about it in his *Essay Concerning Human Understanding* (1690), philosophers grappled with what came to be known as the Molyneux problem. However, it was only in 1728, when the London surgeon William Cheselden operated on a 13-year-old boy, removing the cataracts that had made him blind soon after birth, that Molyneux's thought experiment could be practically tested.

Cheselden, working before Daviel's pioneering surgery, used a method known as 'couching' to push the opaque lens from the line of vision with a special needle. This method had been practiced, with minimal success, since antiquity. The lens rather than the retina was thought to be the vehicle of sight and the cataract (from *cataracta*, Latin for waterfall) a coagulated obstruction between it and the pupil. By working the hardened, or 'ripe', cataract away from the pupil with a sharp point, pushing it to the back of the eye or breaking it into pieces, it was hoped that sight could be restored.

The Cheselden boy's 'conversion' to sight (attended by a local minister) was described in almost biblical terms. 'When the patient first received the dawn of light there appeared such ecstasy in his action that he seemed ready to swoon away in the surprise of joy and wonder', wrote one witness to the boy's Damascus moment. In the sensory confusion of first sight, the boy 'thought all objects whatever touch'd his eyes'. Molyneux's problem was therefore answered in the negative – the boy couldn't distinguish a cube and sphere without testing them first with his hands (he had to learn to see) – but the debate still raged. Was the boy asked leading questions? Had he been given time to recover from the operation? Was he intelligent enough?

Surgeons were keen to replicate Cheselden's success and contribute to this philosophical discussion. However, eye surgery, with its promise of dramatic cures, remained a controversial field. Operations were often performed by itinerant barber surgeons, rogue oculists who would travel across Europe, and as far as Russia and Persia, performing these dangerous procedures in the central squares of towns and before large audiences. One such quack doctor, John Taylor, who had in fact been trained by Cheselden at St Thomas's, would arrive in a carriage painted with pictures of eyeballs and the motto: '*Qui dat videre dat viver*' (He who gives sight, gives life).

Taylor treated people from all social strata, and claimed to have cured emperors, popes and kings (including George II). It was lucrative work; if people couldn't pay his exorbitant fees, he accepted valuables, such as a gold fob watches instead. He distributed handbills that lauded him as 'Chevalier' and 'Ophthalmiater Royal' and used flamboyant, occult techniques, such as administering eye drops created from the blood of slaughtered pigeons. The French surgeon Pierre Guérin described how Taylor would bind his patients' couched eyes with gauze that included egg white, baked apple or salt, and sometimes a coin: 'He would exalt; he would proclaim a miracle; he plugged the eye with firm recommendation not to uncover it until after five or six days, and he left on the fourth, after having

exploited the victims of his bad faith.'

In 1750 Taylor operated on the 66-year-old Johann Sebastian Bach in Leipzig. On this occasion Taylor was still around when the composer's bandages were removed a week later. Having failed to restore his sight, Taylor operated on Bach's eyes a second time and administered mercury treatment and bleeding. Rendered completely blind, and in terrible pain, Bach died a few months after his surgery from a post-operative infection. Eight years later, Taylor operated on George Frideric Handel in London with a similar lack of success. Handel, who had already undergone several couching operations, spent the last decade of his life in darkness. He would cry as he listened to the aria from his oratorio, Samson (1741): 'Total eclipse: no sun, no moon, all dark amidst the blaze of noon.'

Jacques Daviel's newly invented technique, which might have saved Handel's vision, gave some much needed legitimacy to eye surgery and remained the predominant technique until the 1950s, when ophthalmologists began inserting artificial lenses into the eye; now technological developments and prosthetics such as laser surgery, retinal simulators and touch-sight devices offer new hope to the long-term blind. While a few charlatan cataract cutters replaced them, couching quacks like Taylor went out of business in the late-eighteenth-century. Taylor died in obscurity; with poetic justice, and like his many victims, he also died blind. Samuel Johnson liked to cite his career as a cautionary tale, an example of 'how far impudence may carry ignorance'.

#### Notes

Image: Eye operation from Denis Diderot's Encyclopédie (1762–72). Wellcome Library, London.

*Chekhov never just made a slice of life – he was a doctor who with infinite gentleness and care took thousands and thousands of fine layers off life. These he cultured, and then arranged them in an exquisitely cunning, completely artificial and meaningful order in which part of the cunning lay in so disguising the artifice that the result looked like the keyhole view it never had been.*  
Peter Brook, *The Empty Space*, 1996

*[Zeus] said: 'Methinks I have a plan which will enfeeble their strength and so extinguish their turbulence; men shall continue to exist, but I will cut them in two and then they will be diminished in strength and increased in numbers; this will have the advantage of making them more profitable to us. They shall walk upright on two legs, and if they continue insolent and will not be quiet, I will split them again and they shall hop about on a single leg.' He spoke and cut men in two, like a sorb-apple which is halved for pickling, or as you might divide an egg with a hair; and as he cut them one after another, he bade Apollo give the face and the half of the neck a turn in order that man might contemplate the section of himself: he would thus learn a lesson of humility.*  
Plato, *Symposium*

*Apartment houses were seen as privileged settings for Parisians and their plots...as sites of a narrative available only to the urban initiate, who with the aid of the urban observer would become aware of 'entire novels hidden in the walls of a house' ... The visual arts represented apartment houses as both static objects and animated scenes, as pictorial, frontal planes to be viewed and as spaces through which to move, if only illusionistically ... The writers who represented the city to itself thus not only emphasized apartment houses as elements of the Parisian landscape but also saw through the apartment house, treating it as a lens or as a point of view and not simply as an opaque visual object. In the process, they imagined apartment houses to be as transparent as they wanted the city to be.*  
Sharon Marcus, 'The Portière and the Personification of Urban Observation', *The Nineteenth-Century Visual Culture Reader*, 2004

#### UNTITLED FRAMEicarium

Hugh Hayden

The ant farm projects were initially developed in collaboration with Katie Vitale. Katie and I were architecture classmates at Cornell University and remained great friends following graduation. We decided to collaborate on a proposal for a design show creating sophisticated pet enclosures. The project we realised was a collection of framed ant farms we called FRAMEicariums.

Childhood ant-farms are re-imagined into a living work of art that showcases the geological excavations of the tunnels formed by ants. The FRAMEicarium is constantly changing and active. It demonstrates the elegant performance of everyday tasks and behaviours of an ant community.

Viewers of the ant farm will soon discover how complex and sophisticated the ant community really is, both in terms of behaviour and the building of its spaces. The tunnels created are quite geometrical in form, typically sloping down to the right, with transverse branches. The ants create different spaces within the tunnels, typically including a kitchen, a dining hall, a sleeping area and even a cemetery.

The ants used in this installation are *Lasius Niger* (Black ants), a common ant found in the UK.

Untitled FRAMEicarium: acrylic sheets, stainless steel bolts and nuts, sand, water, *Lasius Niger* (Black ants), frame from the estate of American financier, banker and art collector J P Morgan and a reproduction Hudson River-esque print titled *Enchanted Glade* by T Banks

HUGH HAYDEN is a 26 year-old architect, artist and designer from Dallas based in New York City. Hugh was a recent winner of the prestigious Skidmore Owings & Merrill \$20,000 Travel Fellowship to study dining design in the US, Japan, France and Spain.

To look at the cross-section of any plan of a big city is to look at something like the section of a fibrous tumour.

Frank Lloyd Wright, *The Living City*, 1958

Kramer: 'I've cut slices so thin, I couldn't even see them.'

Elaine: 'How'd you know you cut it?'

Kramer: 'Well, I guess I just assumed.'

Kramer and Elaine, discussing a meat slicer, 'The Slicer' (*Seinfeld*), 1997

But the enemy were quick to gain the protection of the wandering line of fence. They slid down behind it with remarkable celerity, and from this position they began briskly to slice up the blue men.

Stephen Crane, *The Red Badge of Courage*, 1895

Got me a movie

I want you to know

Slicing up eyeballs

I want you to know

Girly so groovy

I want you to know

Don't know about you

But I am un chien andalusia

Pixies, 'Debaser', *Doolittle*, 1989

Red Murray's long shears sliced out the advertisement from the newspaper in four clean strokes. Scissors and paste.

James Joyce, *Ulysses*, 1922

'Slice-of-life' commercials are much in vogue on Madison Avenue these days. The trend has reached such proportions in fact, that some advertising men have begun to wonder, as one agency man puts it, 'just how many slices the American public will take'.

Peter Bart, 'Advertising: "Slice of Life" Sparks a Debate', *The New York Times*, 1963

A cutting machine so delicate that it can slice microscopic germs in two has given scientists their first means of seeing and studying the minute structures within the nucleus of a cell. The machine cuts tissue into slices so thin that edgewise they could not be seen by the naked eye. But these infinitesimal films, examined under

an electron microscope, produce images so clear that details which could never be seen before become visible.

'Thinnest Slice', *Life*, 1949

Removal of the brain, slice by slice, in the lower animals is followed by a corresponding reduction both of intelligence and of power of voluntary movements which disappear together in about an equal degree. Frances Emily White, 'Muscle and Mind', *Popular Science*, 1889

Two slices or two hundred, as long as the indicator points to the same position, each slice will be exactly like the one before – controlled by our Flexible Timer that individually times each slice of toast.

Advertisement for Toastmaster Hospitality Tray, *Life*, 1937

We are only tenants

Living on the Land

It is not ours to slice and box

And mark it ... Contraband

Rhoza A Walker, 'We Are Only Tenants',

*The Crisis*, 1943

The secret of seeing through normally opaque, hard materials lies in the process of preparing them for the microscope. This consists essentially of slicing them into sections thinner than the finest tissue paper.

Morton C Walling, 'Seeing Through Coal', *Popular Science*, 1938

His school mascot is the 'Slicer', an emblem that recalls the northern Indiana town's hardworking origins; the name comes from the local plant that produces meat-slicing equipment, and La Porte High School is the only school in the nation with the Slicer mascot.

Eric Fruth, 'Hoosier Harriers Then and Now', *Running Times*, 2008

And the Dial-0-Matic® slicer lets you easily control the precise thickness of foods for drying uniformity.

Ronco Dial-0-Matic Slicer advertisement, *Vegetarian Times*, 1993

## WEBSTER WITHDRAWN

Brian Dettmer

The age of information in physical form is waning. As intangible routes thrive with quicker fluidity, material and history are being lost, slipping and eroding into the ether. Newer media swiftly flips forms, unrestricted by the weight of material and the responsibility of history. In the tangible world we are left with a frozen material but in the intangible world we may be left with nothing. History is lost as formats change from physical stability to digital distress.

The richness and depth of the book is universally respected yet often undiscovered as the monopoly of the form and relevance of the information fades over time. The book's intended function has decreased and the form remains linear in a non-linear world. By altering physical forms of information and shifting preconceived functions, new and unexpected roles emerge. This is the area I currently operate in. Through meticulous excavation or concise alteration I edit or dissect communicative objects or systems such as books, maps, tapes and other media. The medium's role transforms. Its content is recontextualised and new meanings or interpretations emerge.

In this work I begin with an existing book and seal its edges, creating an enclosed vessel full of unearthed potential. I cut into the surface of the book and dissect through it from the front. I work with knives, tweezers and surgical tools to carve one page at a time, exposing each layer while cutting around ideas and images of interest. Nothing inside the books is relocated or implanted, only removed. Images and ideas are revealed to expose alternate histories and memories. My work is a collaboration with the existing material and its past creators and the completed pieces expose new relationships of the book's internal elements exactly where they have been since their original conception.

BRIAN DETTMER is originally from Chicago, where he studied at Columbia College. He currently lives and works in Atlanta, Georgia. Dettmer's work has been exhibited and collected throughout the United States, Mexico and Europe

At the seed-time, the farmers of a district would assemble together; a human victim was selected, was bound as a sacrifice to the altar, and was devoted to the most barbarous death. While the priests proclaimed the omens to be propitious, our farmer would come, and with a large knife, would take a slice from the victim, would carry it away to his field, and would press the blood out of it while it was yet warm, and then bury it in the earth. A second, and a third, and a fourth, would come and act a similar part, till the wretched man was sliced in pieces while he was yet alive, and was consigned to various parts of the ground. But why this barbarity? That the favour of Maree might he obtained, and that no curse, nor blight might rest upon their land; and that a richer harvest might arise from fields watered by the blood of sacrifices. Oh! these dark places of the earth are still full of the habitations of cruelty. Kazlitt Arvine, *Cyclopædia of moral and religious anecdotes*, 1848

I am not going to indulge in a no-rent manifesto. But we put a programme before you that will lead to that result – that will first take one slice, then take a second slice, and we will keep slicing at it till nothing remains. M Harris (Member for East Galway), in Edmund Burke (ed), *The Annual Register: A Review of Public Events at Home and Abroad, for the Year 1887*

The threat, then, posed to democratic politics in an era of information saturation and savvy reflexivity, is quite different from that associated with information scarcity. Techniques for cutting through the glut and thin-sliced thought are offered up as strategies for managing information proliferation and the threat of misrepresentation, but they reinforce and reproduce the logic of the affective fact.

Mark Andrejevic, 'Thin-Sliced Thoughts and Theory's Ends', *MediaTropes*, 2010

Here a vertical labyrinth in a tower, like a slice through a helical shell; there a maze of obstacles in the street, first cousin to the tangle of the forest. Paul Hammond, *Constellations of Miró*, Breton, 2001

*Socialist human nature is, after all, but a slice from the common stock, and is not cast in any ultra-heroic mould.*

J Keir Hardie, 'The International Socialist Congress', *The Nineteenth Century and After*, 1904

*What in fact results from selection and editing is a compression of reality, a slice of reality – which must nonetheless reflect the essential truth without distortion ... Production techniques may not be used to distort reality nor to have the effect of producing editorial comment.*

'Corporate Policies – 1.2, Journalistic Standards and Practices, Sect IV Production Standards, B Information Processing, 2 Editing', Canadian Broadcasting Corporation/Radio Canada

*One writer in International Design Magazine waxes philosophical about the Visible Human Project ('... a mesmerising beauty and realism ... Death never looked this good'), describing the interior of Jernigan's skull as 'a quiet cathedral whose congregation and clergy have been removed, although the sacred remains.' This epitomizes for me the instrumentality of the aesthetic itself, which requires that we replicate Jernigan's execution by abstracting the image of his body from the conditions of his life. When we see his cadaver we are not meant to ask questions about who he was, how he came to die, and what it means for the state to take a man's life. Rather, his death as an empirical and specific subject was the precondition for his elevation to the status of an aesthetic event that will place us in touch with the universal questions of man's spiritual identity. The aesthetic demands a kind of amnesia of the object; we must forget where it came from.*

Susan Buck-Morss, 'Aesthetics after the End of Art: An Interview with Susan Buck Morss', *Art Journal*, 1997

## BAYLEY STREET TO BEDFORD SQUARE 2008–2010

Kevin Sheppard

Our view of the world is a lie, corrupted by perspective. We know objects further away are not smaller than objects closer to us, but our eyes tell us otherwise.

How can we escape this view? What does the world look like without perspective? What does the world really look like?

My photographs are an attempt to answer these questions. I want to revisit the world with orthographic eyes. I want to represent the world truthfully, not how my eyes see it, but how it really is.

The section is a way of seeing relationships between spaces. Relationships between main rooms and service spaces, between inside and out, between roof and basement, between people and space, between permanent and temporary, between formal and informal. The section is a portrait of place.

KEVIN SHEPPARD studied architecture at Westminster University and the AA. After graduating, he pursued a career in the emerging field of digital special effects. He has worked on numerous Hollywood films and TV projects and has received multiple awards. He is currently head of creative 3D at Saddington Baynes. He has also taught at the AA and been a visiting critic at the Bartlett, Goldsmiths College and Falmouth School of Art.

## BIOGRAPHIES CURATORS OF THE SLICE

D GRAHAM BURNETT is Professor of History of Science at Princeton University and an editor at *Cabinet* magazine. He is the author of four books, including *Descartes and the Hyperbolic Quest* (2005) and *Trying Leviathan* (2007), which won the New York City Book Award and the Hermalyn Prize in Urban History. His video collaboration with the artist Lisa Young, "Free-Fall: The Life and Times of Bud 'Crosshairs' MacGinitie" was shown at the Wellcome Collection earlier this year. In 2011 he will complete a two-year Mellon Foundation Fellowship supporting work at the intersection of science, technology, and the visual arts.

CHRISTOPHER TURNER is the editor of *Icon* magazine. A former editor-in-chief of *Modern Painters* and an editor at *Cabinet*, he is a regular contributor to the *London Review of Books*, the *Sunday Telegraph* and *The Guardian*. He completed a PhD at the London Consortium – a post-graduate PhD programme in the humanities at the University of London, of which the Architectural Association is a Part – and helped set up the Central Cities Institute, an urban think-tank based at the University of Westminster. Turner's *Adventures in the Orgasmatron: How the Sexual Revolution Came to America* will be published in 2011.

## COLOUR IMAGES

1. Uta Kögelsberger  
*road series, Yosemite, 2006*  
120 x 150 cm

2. Sue Barr  
*Contrada Cerrano, 2010*  
Sotto A14 Autostrada Adriatica  
120 x 90 cm

3. Eva Stenram  
*Per Pulverem Ad Astra 5.AP1, 2007*  
C-type /unique print  
23 x 34 cm  
Source images courtesy of  
NASA/JPL-Caltech

4. Bleda y Rosa  
*Mendoza, invierno de 1834*  
Mendoza, 1995  
85 x 150 cm

5. Hélène Binet  
*Paysages en poésie, 2004*  
100 x 100 cm

6. Corinne Silva  
*Badlands, 2009*  
Fibreglass rock II, Desert Springs gated  
golf community, 127 x 101 cm

*No matter how thin you slice it, it's  
still baloney.*  
Alfred E Smith, Governor of New York, 1936

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Exhibition curated by D. Graham Burnett  
and Christopher Turner and designed by  
AA Exhibitions: Vanessa Norwood, Lee  
Regan and Luke Currall.

With thanks to:  
Catherine Hansen  
Brian Miller  
Anna Platt  
Selina Hurley and Emma Duggan  
at the Science Museum  
Dr Marie-Louise Collard at Wellcome  
Library

Exhibition guide produced  
and edited by AA Print Studio  
Design: Wayne Daly  
Art Direction: Zak Kyes

Printed by Aldridge, England

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The Slice: Cutting To See

AA Gallery  
20 November – 15 December 2010  
Monday to Friday 10am–7pm  
Saturday 10am–3pm







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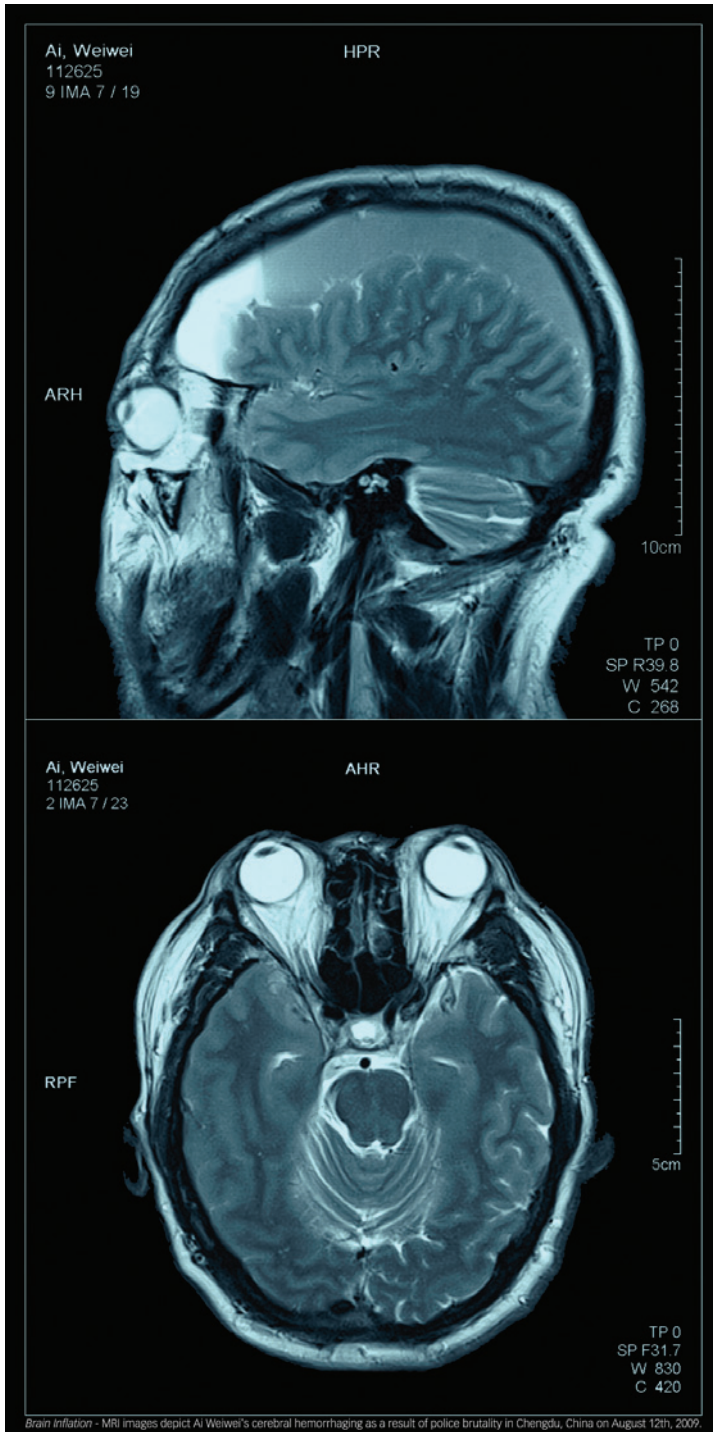


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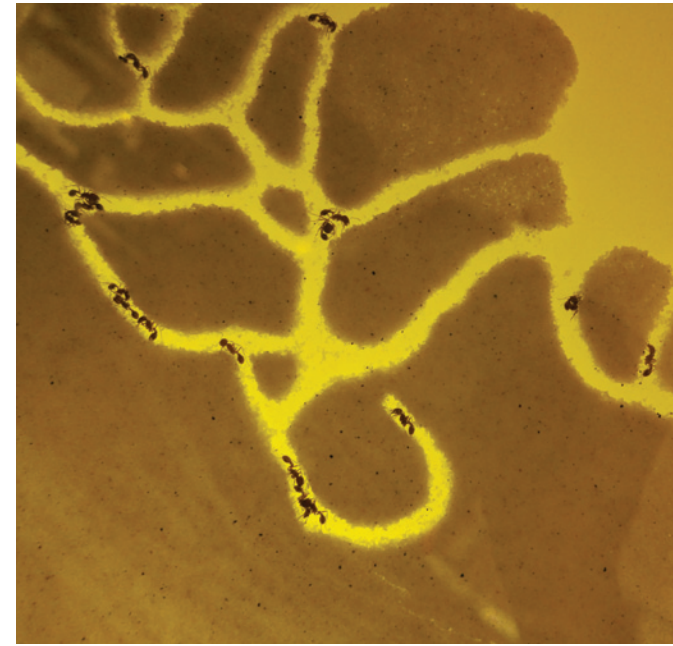
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Brain inflation - MRI images depict Al Weiwei's cerebral hemorrhaging as a result of police brutality in Chengdu, China on August 12th, 2009.



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