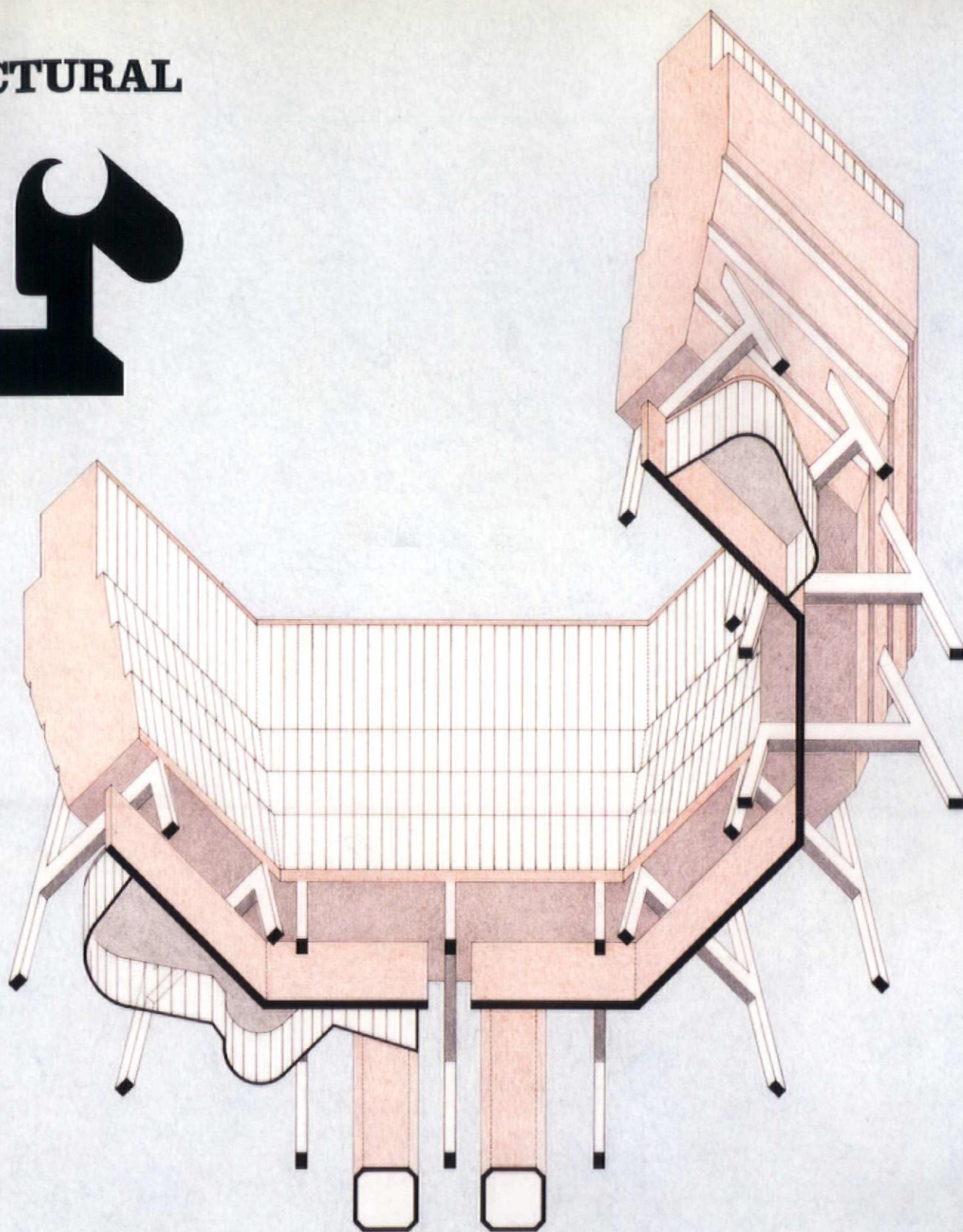


THE ARCHITECTURAL REVIEW



1370 APRIL 2011 £9.90 / €19 / US\$28 WWW.ARCHITECTURAL-REVIEW.COM

Situating Stirling – new perspectives on his legacy

Frank Gehry adds to the Manhattan skyline

Michael Wilford's regal British embassy in Tbilisi

VIEW / Japan and the world's nuclear future /

Australian bush workshop / Peter Cook redux



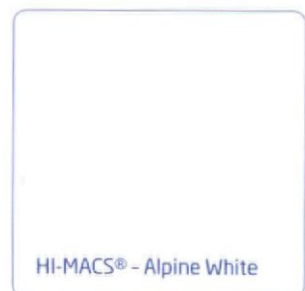
PEI PARTNERSHIP ARCHITECTS

LIBRARY

PLEASE DO NOT REMOVE

HI-MACS® - THE NEW GENERATION. Inspired by Architecture.

YOU HAVE THE IDEA. WE HAVE THE MATERIAL.



HI-MACS® - Alpine White

HI-MACS® is the material of the latest generation: the natural acrylic stone is visually seamless, hygienic, thermoformable, comes in a range of over 100 colours and offers a unique 10 + 5 year guarantee.



Information and samples can be obtained from:
Alex Gray,
phone 01732 424 240
e-mail
ukoffice@himacs.eu

www.himacs.eu/arc

More projects and new ecological colours here.

HI-MACS®
Natural Acrylic Stone™



1370

VOLUME CCXXIX

ARCHITECTURAL-REVIEW.COM

VIEW

- 020 Japan's nuclear crisis underlines the need for regionally-appropriate forms of low-energy architecture
- 024 Australian architects celebrate the primacy of the landscape at the Ozetecture Summer School
- 027 Engineers consider how and where Christchurch City in New Zealand should be rebuilt
- 029 The Energy Report looks at how the world can be powered by 100 per cent renewable energy by 2050
- 033 Colourful provocateur Peter Cook returns to the AR's Opinion pages
- 034 The Protek round-table takes the global temperature at MIPIM
- 037 AR House Award invites entries for the best one-off house

BUILDINGS

039 Map

216

040

Michael Wilford

British Embassy, Tbilisi,
Republic of Georgia

217

048

Hagy Belzburg

Museum of the Holocaust,
Los Angeles, USA

218

054

ZigZag Architectura

Social Housing, Mieres,
Asturias, Spain

219

062

Manuel Maia Gomes

Cultural Centre, Vila do Conde,
Portugal

220

066

Frank Gehry

Eight Spruce Street, New York, USA

HISTORY

- 072 Reassessing James Stirling's legacy, with critics Robert Maxwell, Brian Hatton, Sam Jacob and others
Cover James Stirling

SKILL

- 082 Niall McLaughlin replicates the Elgin Marbles for a facade on London's Olympic Village housing

UR

- 086 A pick of the latest developments in bathroom fixtures and fittings from Frankfurt's ISH trade fair

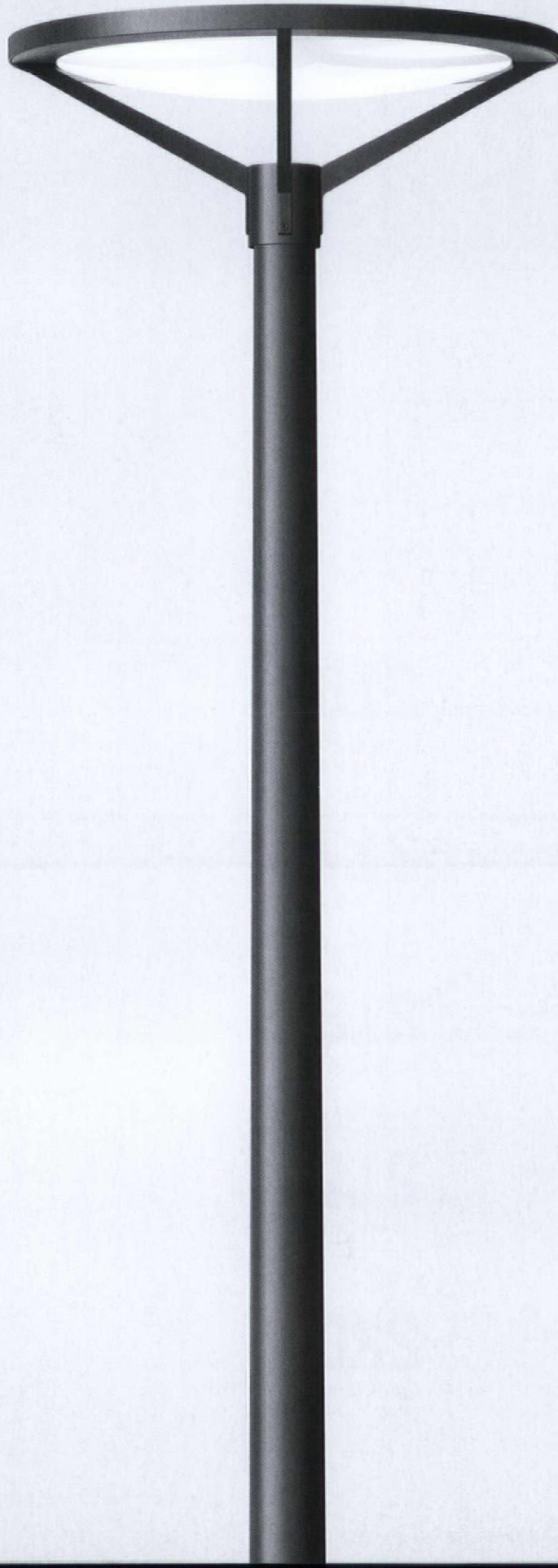
MARGINALIA

- 088 A trio of London shows: the RA's Modern British Sculpture; Pioneers of the Downtown Scene at the Barbican; Anthony McCall

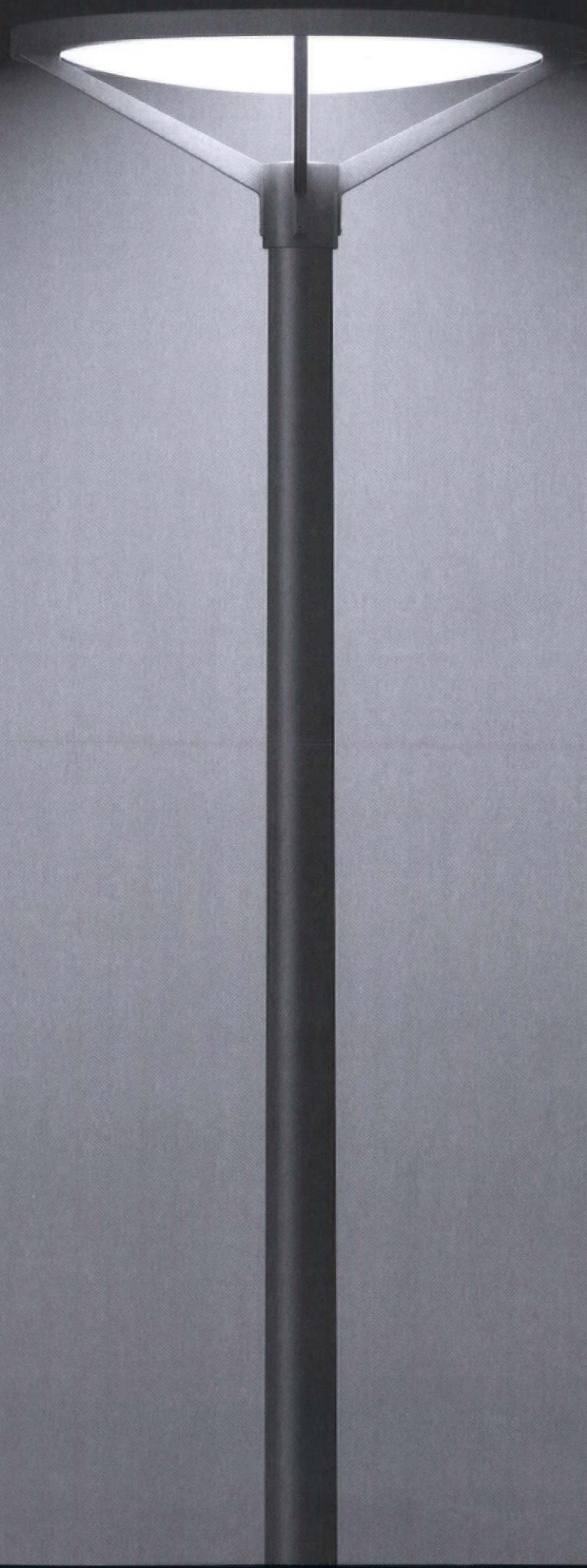
DELIGHT

- 098 CJ Lim bakes a cake of London's landmarks using wild imagination, paper and scalpels

Day after day.



Night after night.



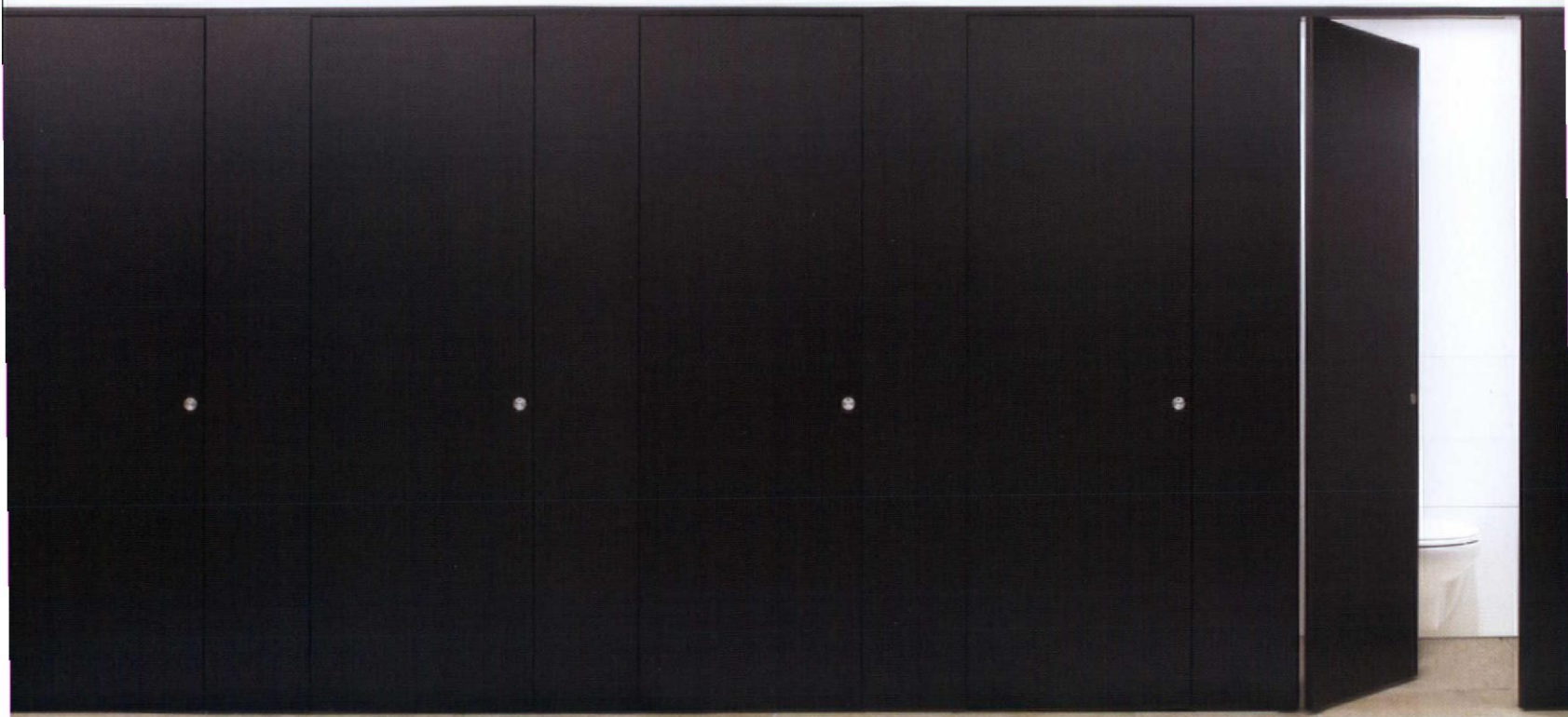
BEGA

BEGA – Light outdoors.

Distribution in the U.K.:
ZUMTOBEL
Lighting Limited
Unit 4 The Argent Centre
Pump Lane, Hayes
Middlesex, UB3 3BL
Tel. 0044 (0) 20 8589 1833
Fax 0044 (0) 20 8756 4833
www.bega.com

Pole-top luminaires with
symmetrical light distribution
Protection class IP 65
with LED or for fluorescent lamps





flow. Walk through walls.



Stretching up to 2.7 metres, clear from floor to ceiling, **flow** has the appearance of a continuous wall, with only its elegant, flush-mounted locks to indicate the cubicles it conceals. Our patented hydraulic closing mechanism is totally hidden in the top mounting rail and hinges are invisible from the outside, completing the illusion of a wall you can walk through.



Through fixed stainless steel lock, incorporating flush fitting face plate.



Polished stainless steel pivot, supported from concealed load bearing hydraulic closer.



Rebated doors achieve a completely flush surface finish.



thrislington cubicles

Product: flow

Scale: nts

Contact: t +44 (0)1244 520 677

w www.thrislingtoncubicles.com

e info@thrislingtoncubicles.com

ven

Premium new range of innovative and inspiring products.

Exceptional materials and finishes.

Bespoke washroom solutions to fit your environment.

Contact us to order our new brochure. Call 01474 353333. www.venesta.co.uk



We know washrooms.

Venesta



Premium new range of innovative and inspiring products.

Exceptional materials and finishes.

Bespoke washroom solutions to fit your environment.

Contact us to order our new brochure. Call 01474 353333. www.venesta.co.uk

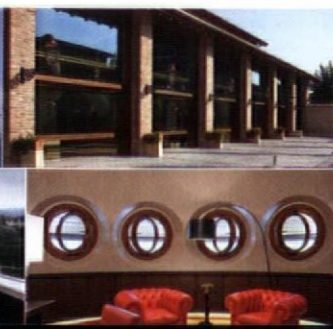
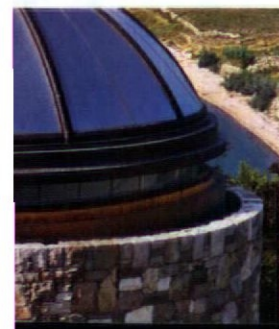


We know washrooms.

Venesta

CUSTOM MADE WINDOWS BY CAPOFERRI

Modern by tradition since 1894






CAPOFERRI®
 SERRAMENTI

+39 035934074
www.capoferri.it
info@capoferri.it

AR HOUSE 2011

A £10,000 prize for the design of a one-off house

The private house occupies a unique position both in the history of architecture and the human imagination. Beyond its core function of shelter, it is an object of fantasy, a source of delight, a talisman and a testing ground. From Le Corbusier to Rem Koolhaas, the progress of modern architecture can be traced through a succession of pioneering individual houses. Regardless of scale, site or budget, the house offers the potential for genuine innovation and is critical to the ferment and crystallisation of architectural ideas.

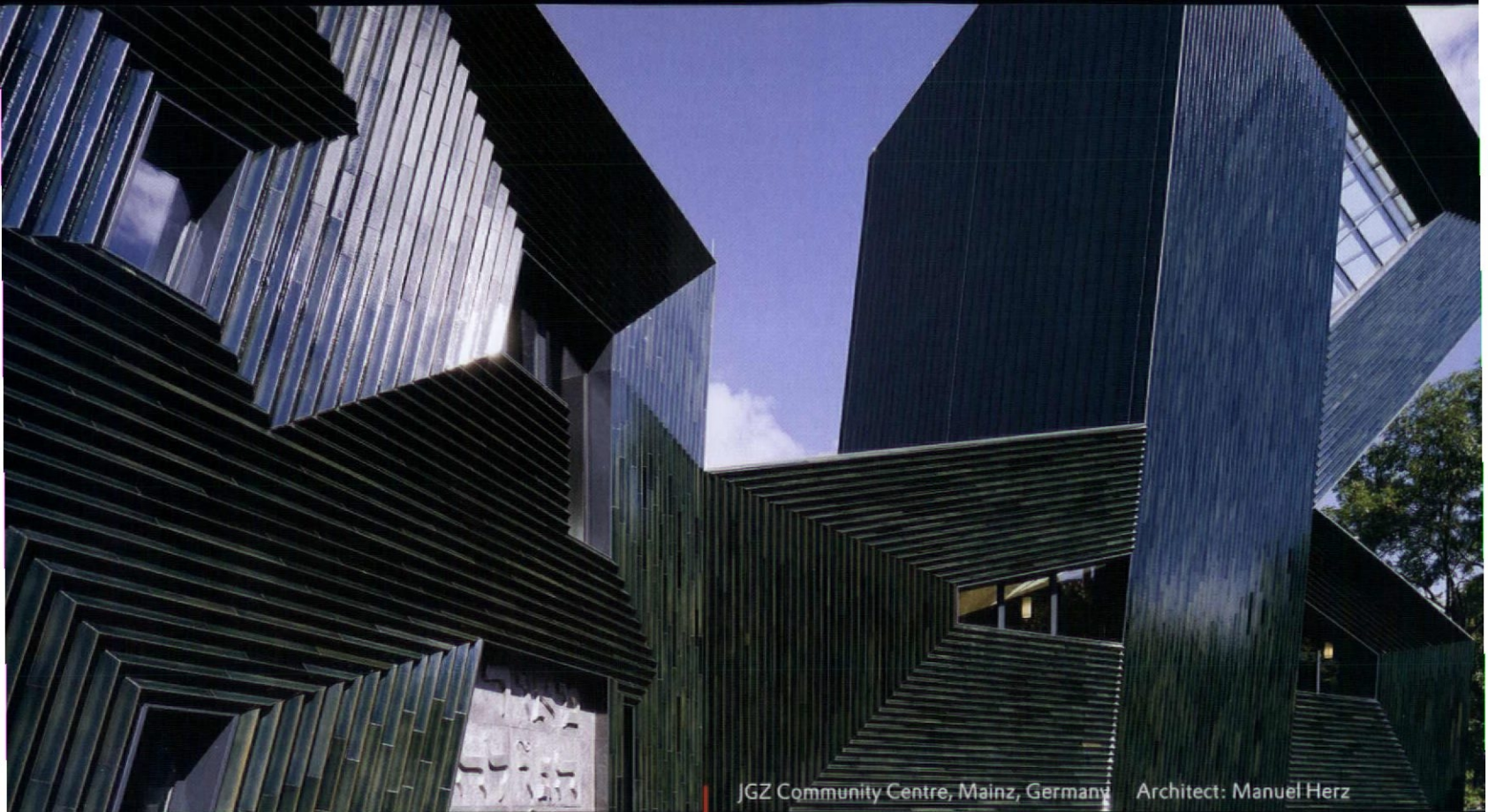
AR House celebrates this wellspring of creativity with a major award of £10,000 for the design of the best one-off house. All projects must be built. There is no age limit. Entries will be judged by an international jury chaired by Catherine Slessor, AR Editor. Entry deadline is 23 May.

For more information email jo.kirkpatrick@emap.com or call 020 7728 3715
For sponsorship opportunities email nick.roberts@emap.com or call 020 7728 4608

www.arhouse.co.uk
priority code ARH1







JGZ Community Centre, Mainz, Germany

Architect: Manuel Herz

THE **MARKET LEADER** IN

ARCHITECTURAL TERRACOTTA

NBK | Ceramic

ARCHITECTURAL TERRACOTTA

NBK Keramik GmbH
Reeser Strasse 235
D - 46446 Emmerich / Germany
Tel: +49 (0) 28 22 / 81 11 - 0
Fax: +49 (0) 28 22 / 81 11 - 20
email: info@nbk.de

www.nbk.de

Member of

HunterDouglas Group



Architects should be leading the debate about energy use and buildings

Cataclysmic events in Japan and the ongoing conflict in Libya have thrown the precarious nature of energy dependence into sharp relief. In the developed world, buildings are still responsible for half of all energy consumed, so clearly architects have a crucial part to play in shaping the discussion about the relationship between energy use and the built environment.

Over the last decade, notions of sustainability have gained genuine political and cultural traction, but also thrown up the distracting spectre of greenwash, which pays lip service to green ideas without really changing the game. With their generalist perspective across a wide range of disciplines, architects are well placed to lead a world changing debate rather than being supine followers or obliging purveyors of luxury icons.

Away from the global energy apocalypse, this issue renews some old acquaintances – first with Peter Cook, the inaugural contributor to our new Opinion column (page 33) and secondly with James Stirling, whose remarkable legacy is revaluated in depth by an array of critics and thinkers (page 72). Big Jim's premature death in 1992 was an immense loss to architecture and nearly 20 years later his absence is still felt.

CATHERINE SLESSOR, EDITOR

- 048 **IWAN BAAN**
ALAN BALFOUR
MATTHEW BARAC
- 094 **CRYSTAL BENNES**
PETER BLUNDELL JONES
TIMOTHY BRITTAIN-CATLIN
- 088 **PETER BUCHANAN**
DANA BUNTROCK
BRIAN CARTER
- 033 **PETER COOK**
WILLIAM JR CURTIS
- 078 **PETER DAVEY**
- 027 **LAYLA DAWSON**
CATHERINE DU TOIT
- 033 **NEAL FOX**
- 040 **DENNIS GILBERT**
- 052 **FERNANDO GUERRA**
- 078 **CHRISTOPHE GRAFE**
- 054 **ROLAND HALBE**
- 076 **BRIAN HATTON**
- 078 **SAM JACOB**
- 020 **DOUG KING**
- 068 **MARK LAMSTER**
LESLEY LOKKO
DUCCIO MALAGAMBA
- 072 **ROBERT MAXWELL**
- 092 **ANDREW MEAD**
CLARE MELHUISE
ROWAN MOORE
STEVE PARNELL
JAMES POCKSON
PAUL RAFTERY
SEBASTIAN REDECKE
CHRISTIAN RICHTERS
JOSEPH RYKWERT
PETER SALTER
JACK SELF
NICK SHAVISHVILI
- 078 **MARK SWENARTON**
RASMUS WERN
- 048 **MICHAEL WEBB**
RICHARD WESTON
- 029 **AUSTIN WILLIAMS**

Sir Peter Cook is known for many things – Archigram; leading the Bartlett; his knighthood for services to architecture – but at the AR we recall him most fondly for his monthly column, which ran from October 2005 until March 2009. On page 33 we welcome him back as the first of our forthcoming roster of opinion writers

Neal Fox is a London-based illustrator who co-founded the independent art journal Le Gun. He enjoys capturing London's hell-raisers – Mick Jagger, Francis Bacon, Nina Hammett – and has added to this list by penning Peter Cook's new byline portrait on page 33

Doug King, who looks at the implications of the Japanese disaster for the future of nuclear power (page 20), is principal of King Shaw Associates and a visiting professor at the Royal Academy of Engineering

Austin Williams is the director of Future Cities Project and co-author of The Lure of the City: From Slums to Suburbs (due out in September). In this issue he tackles The Energy Report (page 29) which sets forth a vision for the world to be run on renewable energy by 2050

CATHERINE SLESSOR – EDITOR OF THE YEAR
 BSME AWARDS 2010
 ARCHITECTURAL REVIEW – MAGAZINE OF THE YEAR
 IBP AWARDS 2010
 VIOLETTA BOXILL AND CECILIA LINDGREN –
 DESIGNER OF THE YEAR, PPA AWARDS 2010

FOUNDED 1896
 EMAP INFORM, GREATER LONDON HOUSE,
 HAMPSTEAD ROAD, LONDON NW1 7EJ, UK

EDITORIAL

EDITOR **CATHERINE SLESSOR**
 020 7728 4592

SENIOR EDITOR **ROB GREGORY**

DEPUTY EDITOR **WILL HUNTER**
 020 7728 4587

US CONTRIBUTING EDITORS **MICHAEL WEBB, MARK LAMSTER**

DESIGNERS **HEATHER BOWEN, TOM CARPENTER**

PRODUCTION EDITOR **NICOLA HOMER**

DIGITAL EDITOR **SIMON HOGG**

ASSOCIATE WEB EDITORS **SUTHERLAND LYALL, JACK SELF**

EDITORIAL ADMINISTRATOR **CRYSTAL BENNES**
 020 7728 4574

EDITORIAL ASSISTANT **HEIDI WAKEFIELD**

EDITORIAL DIRECTOR **PAUL FINCH**

ADVERTISING

UK ACCOUNT MANAGER **NICK ROBERTS**
 +44 (0)20 7728 4608

INTERNATIONAL ACCOUNT MANAGER **BHARAT JOSHI**
 +44 (0)20 7728 5261

SENIOR CLASSIFIED SALES EXECUTIVE **ASHLEY POWELL**
 +44 (0)20 7728 4518, ASHLEY.POWELL@EMAP.COM

BUSINESS DEVELOPMENT MANAGER **CERI EVANS**
 +44 (0)20 7728 3595, CERIEVANS@EMAP.COM

COMMERCIAL MANAGER **JAMES MACLEOD**
 +44 (0)20 7728 4582

ITALIAN ADVERTISING SALES, MILAN **CARLO FIORUCCI**
 +39 0362 23 22 10, CARLO@FIORUCCI-INTERNATIONAL.COM

US ADVERTISING SALES, NEW YORK **KATE BUCKLEY**
 +1 845 266 4980, BUCKLEY@BUCKLEYPELL.COM

US ADVERTISING SALES, WEST COAST **ERICA SPRINGER**
 +1 323 478 9845, ERICA@ERICASPRINGER.COM

GROUP MANAGING DIRECTOR **NATASHA CHRISTIE-MILLER**

DIRECTOR OF ARCHITECTURE AND MEDIA **CONOR O'NEILL**
 +44 (0)20 7728 5545

LIST RENTAL **JONATHAN BURSTON**
 UNI-MARKETING
 +44 (0)20 8995 1919, JBURSTON@UNI-MARKETING.COM

SUBSCRIPTIONS AND BACK ISSUES

PLEASE VISIT WWW.SUBSCRIPTION.CO.UK/AR/ASEM
 OR CALL 0844 848 8858
 (OVERSEAS +44(0)1858 438 847) AND QUOTE PRIORITY CODE ASEM

UK DIRECT DEBIT	£99
UK CREDIT CARD	£110
UK STUDENT	£76
EUROPE	€169
AMERICAS	\$160
JAPAN	¥136
REST OF WORLD	£136

AMERICAN COPIES ARE AIR-SPEEDED TO NEW YORK
 BACK ISSUES COST £10 IN UK, £16 OVERSEAS
 UK: 0844 848 8858
 OVERSEAS: +44 (0)1858 438 847
 FAX: +44 (0)1858 461 739
 EMAIL: ARE@SUBSCRIPTION.CO.UK

NON-DELIVERY OF ISSUES AND CHANGES OF ADDRESS

AR SUBSCRIPTIONS, TOWER PUBLISHING, TOWER HOUSE,
 SOVEREIGN PARK, MARKET HARBOUROUGH, LE16 9EF, UK
 TEL: +44 (0)1858 438 847
 FAX: +44 (0)1858 461 739
 EMAIL: ARE@SUBSCRIPTION.CO.UK

AMERICAN SUBSCRIBERS CONTACT:
 THE ARCHITECTURAL REVIEW, C/O PSMJ RESOURCES INC,
 PO BOX 95120, NEWTON, MA 02495, USA
 TEL: +1 617 965 0055
 FAX: +1 617 965 5152

The Architectural Review (ISSN 0003-861X) is published monthly
 for \$199 per year by Emap, Royal Mail International c/o
 Smartmail, 140 58th Street, Suite 2B, Brooklyn, NY 11220-2521.
 Periodicals postage paid at Brooklyn NY and additional mailing
 offices. Postmaster: send address changes to the Architectural
 Review, c/o PSMJ Resources Inc, PO Box 95120, Newton, MA 02495.
 ABC AVERAGE CIRCULATION FOR JULY 2009-JUNE 2010 13,352
 © EMAP INFORM 2010



How to subscribe to The Architectural Review

Visit www.subscription.co.uk/ar/ASEM
 or call 0844 848 8859 and quote priority code 'ASEM'

BETTE
BATHROOMS, NATURALLY

One for all
BETTEONE - one material, one design
for the core areas in the bathroom
made of high-grade steel enamel.

bathing
showering
washing
www.bette.co.uk
architecture@bette.co.uk







OKUMA, JAPAN

Catastrophic events in Japan will severely set back efforts to combat future climate change

DOUG KING

The crisis at the Fukushima Daiichi nuclear power station in Japan will undoubtedly influence public opinion and policy decisions for many years to come. The Three Mile Island meltdown in 1979 was followed by the cancellation of 51 planned US reactors and a similar response has been prompted by the Fukushima emergency. China has suspended approval for nuclear development, Germany has announced the temporary shutdown of seven reactors for a safety review and an early day motion in the British Parliament called for the suspension of plans for a nuclear power programme in the UK.

This news could not have come at a worse time for the international imperative to

combat climate change.

The reality is that, although unpalatable, nuclear power is about the only carbon-free energy source that can be deployed, at least in the short-term, to satisfy our ever-increasing energy guzzling habits. Worldwide, energy demand is likely to grow by up to 50 per cent over the next 20 years. China is currently building new coal-fired power stations at an average rate of two per week and without its planned 20-fold increase in nuclear power by 2030 this rate will only increase.

The UK's strategy to achieve an 80 per cent reduction in carbon emissions by 2050 relies heavily on the wholesale migration of building heating

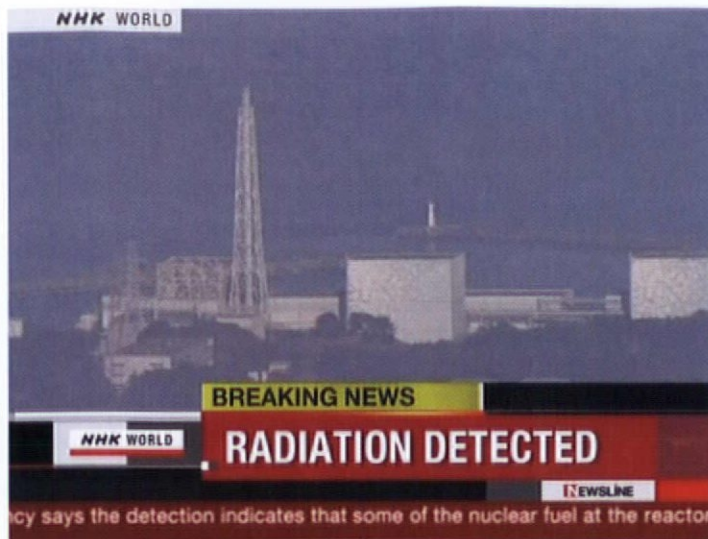
DENNIS M. SABANGAN/EPA/CORBIS

systems from gas boilers to electric heat pumps, together with decarbonising the electricity supply; in other words replacing coal-fired and gas-fired power stations with cleaner alternatives.

During the cold winter of 2010, UK electricity demand peaked at an all-time high of 60GW. Of this only 1GW was provided by renewable sources and 8GW was generated by nuclear power stations. UK generation capacity currently includes 19 nuclear power stations, all but one of which are due to be decommissioned by 2025. If the UK were to shift just one quarter of domestic heating from gas to electric heat pumps by 2030, as proposed by the Committee on Climate Change, then demand for electricity during future cold snaps could double. Without replacement nuclear power, the UK would severely narrow its options with regard to climate change and energy security.

The current fashion, both political and architectural, to bolt micro-renewables onto conventional energy guzzling buildings, will do little to address either energy security or climate change. A recent field trial by The Energy Savings Trust found no instance of a micro-wind turbine in an urban location that generated more than 200kWh per year. In some cases, the electronic controls consumed more electricity from the mains over the course of a year than was generated by the turbines.

As events in Japan and Libya show, future energy security is a compelling reason for developing passive, low-energy architecture. Passively designed buildings utilise natural light and natural ventilation wherever possible and remain naturally warm or cool, without



Previous page_
A protest against nuclear power in the Philippine capital Manila after the Fukushima event
Left_ The devastated nuclear power plant at Fukushima
Below_ Japanese medics checking radiation levels of evacuees from the area around the power plant



the need for electricity. Thus passive buildings not only reduce the need to develop fresh infrastructure, but also have important benefits for their occupiers.

An initial outcome of overstretched energy infrastructure will be rolling power cuts, as grid operators struggle to balance demand with available supply. This is now happening in Japan with the loss of a fifth of the national generation capacity. It also occurred inadvertently in London during an exceptionally hot spell in 2006 when local infrastructure could not cope with increased demand from air conditioning. Deep plan buildings quickly become untenable without artificial

lighting and air conditioning, but passively designed buildings, with shallow plans and natural lighting and ventilation, continue to be habitable, albeit perhaps with reduced comfort levels.

Architecture must respond to its context and climate zone. Buildings designed for the climate of the US Midwest are inappropriate for the Gulf States or South East Asia. Buildings conceived without regard for the local climate or passive design principles rely entirely on energy to make them habitable and so inculcate a culture of energy dependency.

While earthquakes are common in South East Asia, there is also seismic activity in a zone running from South

Eastern Europe, through the Middle East, to the Himalayas spanning Northern India and China. Countries here are looking to nuclear energy either to drive economic development or as an alternative source to previously abundant oil.

It is therefore imperative that developed nations share knowledge and technologies with developing nations. But this should not be limited to ways of producing safe nuclear power in potentially unsafe regions. It should also involve cultivating appropriate forms of low-energy architecture, which will enable economies to grow while minimising the demand for energy, whether through new nuclear power or the worse alternative – coal.

vola

VOLA Round Series.
Discreetly efficient. Visibly VOLA.



VOLA Studio

32-36 Great Portland Street
London W1
Tel: 020 7580 7722

VOLA UK Ltd.

Unit 12, Ampthill Business Park
Station Road, Ampthill
Bedfordshire MK45 2QW
Tel: 01525 84 11 55

sales@vola.co.uk
www.vola.co

Leplastrier and Stutchbury go foraging in the Australian bush at the Ozetecture Summer School

ROB GREGORY

www.ozetecture.org

'This place is full of stories and learning to understand its characters and landscape will enable you to find legibility in other places,' says The Royal Australian Institute of Architects Gold Medallist Richard Leplastrier at the start of this year's Ozetecture Summer School. Leplastrier is addressing a group of students en route to the Ku-ring-gai Chase National Park 30km north of Sydney. Here they will work in teams on the most rudimentary of briefs – to design shelter for human occupation.

Drawn from places as far afield as Korea, Ireland, New Zealand, South Africa and America, some of the foreign urbanites have been a little wary of the untamed bush, but their fears recede as Leplastrier and his protégé and friend Peter Stutchbury, adjust their focal lengths by showing them how to view the landscape with new eyes and new perspectives.

The Ozetecture courses are the brainchild of Irish architect and teacher Lyndsay Johnston, who convinced the pair, along

with Glenn Murcutt, to establish the International Masterclass programme in 2001. Aimed at professionals, the two-week course established the model for this week-long student event.

Over time, Ozetecture has amassed an impressive international alumni, who have made the pilgrimage to experience these architects' apparently mysterious and reclusive form of practice. Yet what is immediately apparent when you meet them in their natural habitat is how quickly they de-mystify decades of patient observation and light-handed intervention.

'When you walk through the bush, look carefully at where you are placing your feet,' Leplastrier begins by saying. 'And if you see something that you want to observe properly, stand still and take your time.' He likens the process of design to the experience of looking through a kaleidoscope, with many elements tumbling before you. 'When you pause and stop turning it, however, then you see a pattern, and it's like that

moment in design when all of the variables come together.'

This gentle yet persuasive teaching style maintains a steady pace, and is enacted through storytelling, walks in dense woodlands, and by visits to the architects' own self-built homes, situated on opposite sides of the Pittwater coastline.

'It's not about teaching site analysis,' says Leplastrier. 'It's about you telling us what your understanding of this place is. Your sketchbook will be your most important tool, and as you draw, try to estimate the scale of the landscape. It's about the relative proportion of us to nature.'

Leplastrier still camps out under canvas whenever a client asks him to design a house, deploying what the Australian critic Rory Spence called his 'heightened senses' (AR April 1998). Understanding the primacy of the landscape and the pleasure of living within limited means are central to his architecture. His houses reflect an urge to discover how much you can afford not to build.

As he describes his latest project, he reflects on what really drives him in his practice. 'I'm 72 now and I have only got a few more shots in the locker, and I want to make them count. I'm doing a job on the south coast, only 85m² enclosed,' he says. 'The rest is a beautiful campsite; that's where Australians learn to live.'

But is this all too good to be true, designing simple timber structures and living in the bush in harmony with the planet? Aren't these students short changed through being taught such a particular approach?

Not a bit of it, says Murcutt, who cites Leplastrier as one of the key influences on his work. 'It's all about teaching them to ask the right questions. And these relate to principals that apply all over the world, in all landscapes,' he explains. 'Wherever you go, there is still the sun, there is still wind. There is still light. There is still human scale. There is still prospect. There is still refuge.'

In May this year, Leplastrier and Stutchbury will be bringing





Ozetecture's philosophy to Europe, with a masterclass in Ireland and a lecture at the Royal Institute of British Architects (RIBA) in London. This was Johnston's initiative, driven by his desire to take their methodology to an even wider audience. But don't expect a vanity slide show featuring the delights of Leplastrier's platforms and parasols, or Stutchbury's distinctive propped and sweeping roofs.

It's clear they intend to use this European platform to engage in hard-hitting straight talk. Speaking of his own nation, but alluding to more universal global concerns, Leplastrier concludes by saying, 'Our society has got rich, quickly, and we are not heading in a good direction. So when we come to London to tell our stories, we're going to lay it on the line, about where our country is going.'

Richard Leplastrier and Peter Stutchbury will be lecturing at the RIBA, on Tuesday 24 May at 18.30. For tickets contact www.architecture.com



Top left_ Richard Leplastrier's own house at Lovett Bay, built in 1994 as a prototype kit
Top right_ Richard Leplastrier works late into the night with students
Middle left_ Peter Stutchbury teaching students at the summer school

Middle right_ Glenn Murcutt joins students for presentation of certificates, along with Lindsay Johnston
Bottom_ Peter Stutchbury's own home, West Head House at Clareville Beach, built in 1991

PROJECTORS \ IN-GROUNDS \ BOLLARDS \ LIGHT COLUMNS \ POST TOPS



reddot design award
winner 2011



LOFOOT

Lofoot is a unique range of distinctive, outdoor architectural luminaires. Designed by eco-designer Jason Thawley, the range provides an energy efficient and low carbon footprint lighting solution that is 98% recyclable.

Paviom is delighted to announce that its signature Lofoot range has won the prestigious red dot award for the product design category. The award is acknowledged worldwide as the seal of quality for outstanding design and innovation.

www.paviom.com

Paviom UK Ltd, The Beehive, City Place
Gatwick, RH6 0PA, United Kingdom
T +44 (0)1293 804 688 E info@paviom.com

A PHILOSOPHY IN LIGHT

paviom

CHRISTCHURCH, NEW ZEALAND

Christchurch contemplates an uncertain future after earthquakes

LAYLA DAWSON

www.civildefence.govt.nz



The humanitarian catastrophes notwithstanding, recent events in Libya and Japan point out the folly of dependence on nuclear power plants in geologically unstable regions or oil peddled by unstable governments. It appears as though the 1970s oil crisis and Chernobyl meltdown are being replayed, which should give urban planners, architects, engineers and politicians all pause for thought.

This is particularly the case in New Zealand, which is faced with the task of rebuilding the heritage city of Christchurch after two major earthquakes. The country is an anti-nuclear

nation but car ownership is vital, since there is no extensive train network. For its national economy, the aftermath of two Christchurch earthquakes and many aftershocks has been compared to 9/11.

Does it make sense to rebuild Christchurch, known as the 'Garden City', on a site that has proved geologically unsafe? Earthquake recovery minister Gerry Brownlee has set his priorities: human life comes before the preservation of heritage buildings, dating back to the city's establishment by Europeans 160 years ago. Of 1,000 historic constructions

assessed so far, 50 per cent are unsafe for use. Surveys conclude that 100,000 homes are in need of repair and 10,000 homes face demolition due to liquefaction, where sub-soils have morphed into quicksand. Engineers are faced with the nearly impossible task of attempting to build a raft foundation, as bedrock for the city, or finding a safer location for a new Christchurch City.

Who will insure any rebuilding on the present site? In March, insurance companies put a stop on new policies, while raising present premiums and deductibles. Following last September's earthquake, the Christchurch mayor, Bob Parker, was in favour of repair work in situ. But now he admits the plan calls for re-examination. The city is worth resurrecting, just not exactly where it once stood.

Before last September, Christchurch had 400,000 residents, making it the second largest city in the country after Auckland. Among its former inhabitants are Nobel Prize laureate Ernest Rutherford, writers Ngaio Marsh and Keri Hulme, and New Zealand prime minister John Key.

Along with the Canterbury and Otago university campuses and a polytechnic, it's a centre for 'new economy' firms, a NZ\$ 9.5 billion tourist industry, and sheep and dairy product distributors. Lyttelton port exports most of the country's coal. The international airport serves 6 million travellers a year, with direct connections to Asia, Australia and the South Pole. The city is home base for the International Antarctic Centre.

New Zealanders, in their characteristic pioneering spirit, pride themselves on being able to fix anything with a wire coat hanger and a pair of tights. Their invention has won war medals and science prizes, but

the majority of the country's 4.3 million population are no longer farmers but urbanites. Cities of the 21st century need long-term planning, strict building regulations and must be able to run on low-cost, energy-saving systems. Only these measures can ensure stable economic growth.

Fearing for their global brand, business lobbies want reconstruction 'as was' and 'asap'. They have no expertise in building fresh solutions. There are models, however, such as Abu Dhabi's carbon-neutral city Masdar, or more modest ones in the vibrant Pacific Rim, where New Zealand architects also work. They have enough experience to seize this opportunity at home, and to initiate a New Christchurch City Corporation, along the lines of post-1945 New Towns in the UK. This is not the time for business as usual, but for a sustainable city that looks to the future.

At present, emergency needs should take priority but at the same time strategies have to be formulated. Mark Binns, chief executive of Fletcher Construction, estimates that Christchurch's recovery will cost NZ\$ 30 billion and focus activity in this area for the next decade. The Green Party warns the collapse of some building firms has caused qualified trade workers to leave to go abroad. If a lead isn't taken soon, there will be a shortfall of skills.

Governments fear unpopularity. They are not construction experts but, if politicians were brave and decisive enough, they could forge an enduring image. This would not only lead to a more sustainable city, but also reinforce New Zealand's international reputation as a non-nuclear, pro-Green and environmentally friendly nation.

IKON IMAGES/CORBIS

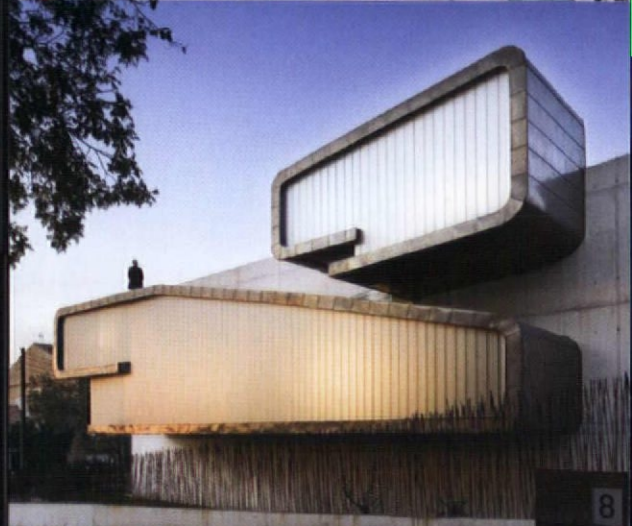
EUROPEAN COPPER IN ARCHITECTURE AWARDS 2011

Call for Entries

This design-led competition covers recently completed buildings from around Europe. To be eligible, all entries must incorporate architectural elements of copper or copper alloys, such as bronze and brass.

The Awards will be presented at a ceremony in September 2011. All winning and commended projects will feature in extensive press coverage, including World Architecture News and a special supplement in The Architectural Review.

Entries must be submitted by 31 May 2011. Entry forms and details are available at the websites below or via e-mail to: helpline@copperdev.co.uk.

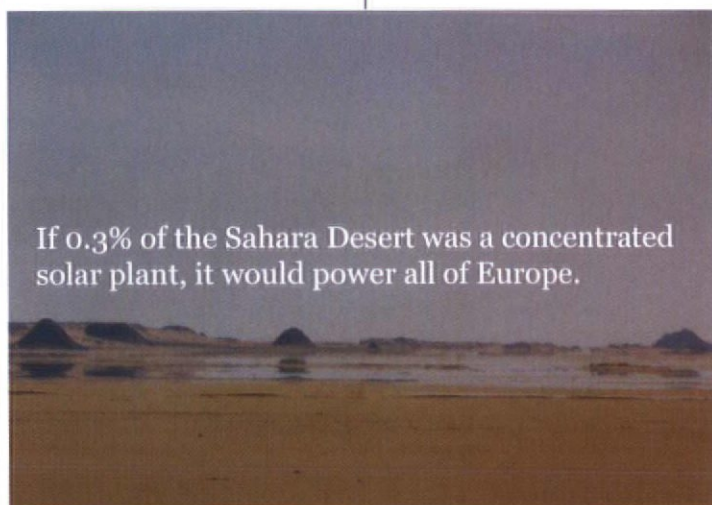


European
copper in
architecture
campaign

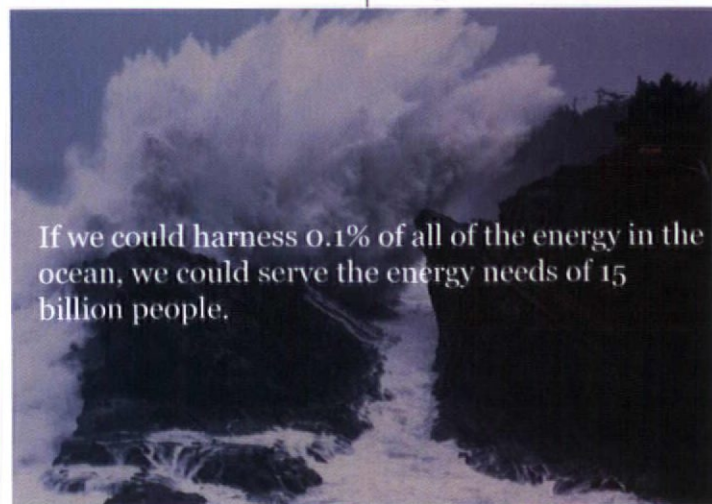
www.copperinfo.co.uk/arch
www.copperconcept.org

A vision of how the world can be run on renewable energy by 2050

AUSTIN WILLIAMS



If 0.3% of the Sahara Desert was a concentrated solar plant, it would power all of Europe.



If we could harness 0.1% of all of the energy in the ocean, we could serve the energy needs of 15 billion people.

Above_ Designed by OMA's consultancy, The Energy Report's images highlight the potential of renewable energy with soundbites

If you enjoy reading end-of-year accounts, or poring over corporate brochures, you will love The Energy Report – the eco-equivalent of a BP audit statement. Written by a huge number of people from WWF, together with some from 'Ecofys (a Dutch renewable energy consultancy), the report has been designed by AMO, the consulting arm of Rem Koolhaas' OMA.

The report's stated aim is to show how the world can be powered by 100 per cent renewable energy by 2050. The first half is the high-gloss, high-quality design stuff with soundbite pull-quotes in huge letters superimposed over images of sand dunes at twilight. This section is partial, rhetorical and speaking to the converted. It is an example of what is called advocacy research, which, unlike real research, has a biased objective, and uses facts to prove its stance.

The second half of the report, written by Ecofys, is data heavy and visually tedious, presumably because the designers did not think that many people would get that far, or that geeks don't appreciate aesthetics. However, it is this latter half that is the useful, relatively value-free analysis of the data.

The WWF section contains grainy photographs of cars in unspecified flood conditions overwritten with the warning that 'Climate change is already a reality'. A row of evil, black metal canisters meets with the statement: 'Nuclear is an unethical and expensive option.'

This section is thus merely polemic and we have heard the argument before. Notwithstanding the Fukushima nuclear power plant disaster (see pages 20–22), the WWF's anti-nuclear stance runs counter

to many leading activists, but this is not allowed to stand in the way of a rhetorical flourish.

By contrast, the Ecofys' half of the report comprises future modelling scenarios, based on relatively neutral assumptions. In the process of outlining its projections for 2050 and beyond, at least it allows for manufacturing improvements that would happen, regardless of the nudging hand of environmentalism, over the course of the next 40 years.

So for example, it predicts improvements in steel smelting, resulting in efficiencies of two per cent per annum in any case. Similarly, the trend to substitute high-energy clinker for fly ash in concrete production will lead to a natural reduction in fuel use.

Ecofys states that it is hopeful of 'increasing living standards and continuing economic development'. When you scratch the surface, it doesn't actually mean it. Take, for instance, the authors' recommendation that 'renewable energy must be at the heart of... international aid programmes'. They do not display the slightest concern for what this might mean for the sovereignty and development of under-developed countries.

Liberals may recall the devastating conditionality programmes of the International Monetary Fund in the 1970s, where it gave aid at extortionate interest rates. Conversely, this report's conditionality is based on not giving any aid in the first place, unless the recipient can show responsible fuel behaviour. Lo, the missionaries can still taketh away.

There is one peculiar theme that runs through the document: the advice that we in the West should reduce our meat consumption by half to free up

land for biomass crops. The developing world would be allowed to eat 25 per cent more meat than they do at present, although how this totalitarian rationing would be orchestrated is not explained. Equally perverse is the recommendation that 'everyone has an equal right to healthy levels of protein', which makes the meagre United Nations Millennium Development Goal 'to halve the number of people who suffer from hunger' sound positively revolutionary.

Co-written by Dutch and Swiss authors, this report has a few refreshingly non-standard environmentalist attitudes that would have undoubtedly infected a UK publication of this type. It is, for instance, a relief to find not one trace of Malthusianism in this document.

However, environmental activist, John Thackara condemns WWF for being in bed with Big Tech. 'Ecosystems and natural justice have never been a priority for the de facto house architect of globalisation,' he says. 'As for Ecofys, the report's other partner, it's a technology company with no pretensions to be competent on social or environmental issues'.

This is the ultimate Green insult, intended to allude to the 'evils' of Big Pharma. He suggests that the low-tech underdeveloped world should be our model for the future. Mercifully, even though this report advocates that we drive and fly less, and 'avoid things we don't need', what commends the latter half of this report is that it appears to have higher ambitions than normal.

To find the full version of The Energy Report visit
http://assets.wwf.org.uk/downloads/2011_02_02_the_energy_report_full.pdf




Seed. Saw. Seed. Saw. Seed. Saw...
Working with nature's rhythm.
American hardwood.



The volume of hardwoods
standing in U.S. forests has more
than doubled in the last 50 years.

For more information visit:
www.americanhardwood.org

 Follow us on Twitter [ahec_europe](https://twitter.com/ahec_europe)

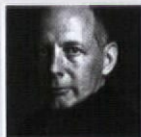


World
Architecture
Festival
Barcelona
2-4 November
2011

The 2011 super jury includes:



MICHAEL
SORKIN



BEN VAN
BERKEL



JO
NOERO



ODILE
DECQ



PROF.
KONGJIAN
YU

Visit
[worldarchitecture
festival.com](http://worldarchitecturefestival.com)
for the full
list of 2011
judges

Plus 70 international jury members including:

James Grose, BVN Architecture, Australia // Isay
Weinfeld, Isay Weinfeld, Brazil // Li Xiadong,
Li Xiadong Atelier, China // Bjarne Hammer,
Schmidt Hammer Lassen, Denmark // Gurjit Singh
Matharoo, Matharoo Associates, India // Yvonne
Farrell, Grafton Architects, Ireland // Akihiko
Hamada, Nikkon Sekkei, Japan // Peter Kudryavtsev,
Rusresorts, Building, Russia

Architectural Excellence - Live!

The world's largest, live, truly inclusive
and interactive global architectural awards
programme

1400+ architects - 500+ entries - 236 live
shortlist presentations - 70+ international
jury members - 65 countries represented - 60+
international jury members - 40 inspirational
seminar speakers - 1 Building of the Year - 1
totally unique, unmissable event!

ALL ENTRIES AND VISITOR PASSES ARE BUY ONE
GET ONE FREE! UNTIL 30 JUNE 2011



“WAF is a feast of
architecture, just don't get
too overwhelmed, otherwise you
might lose your head in the
heady atmosphere of WAF.”

Jo Noero, Founding Principal,
Noero Wolff Architects

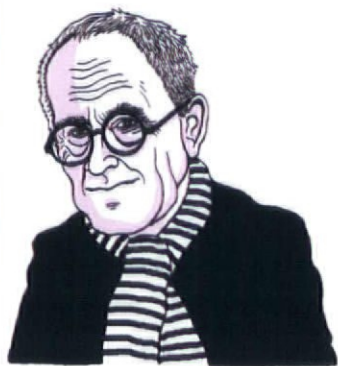
Enter WAF 2011 to showcase your work to a global audience -
raise your profile, win acclaim and secure new business

T: +44 (0)20 7554 5800 / 0845 056 8339 E: info@worldarchitecturefestival.com

Please quote VIP code **ARUK** when entering online

www.worldarchitecturefestival.com

OPINION



Forget biscuit-beige, put away the Wiltshire loam: ours is a world of colour

PETER COOK

The mind becomes dimmed by exposure to unmemorable lobbies, passages or subways, surviving in a world of standing in line, or at best scanning a blandly lit supermarket shelf in search of cheap optical fun.

I have been reminded of this as I slither around the world from Clerkenwell to Santa Monica, from Seoul to Grenoble – or wherever. Some stopping points are agreeable, especially Nordic airports, which enjoy a mixture of comfort, cultural self-confidence and developed 'eye' that appears to understand the value of light, view, glass, texture and piquant colour in respect of mass surface.

Compare with even the best North American terminals: grey, beige, grey, grey. Washable (maybe), memorable (never), delightful (hardly) and aesthetically lost somewhere in

the period of the Second World War. Experts on the subject tell me that America's corporate world eschews challenge and hates particularity. So Nordics are, presumably, too arty and too weird. Yet a one-hour line-up in Helsinki is no less tiresome than the same one in Buffalo: simply sweeter to the eye and mind.

In particular this issue of colour hits me hard. Even if the architect who I miss the most – Enric Miralles – had the most abysmal taste in colour and the most miraculous taste in form. The Smithsons' took delight in toys and brightly coloured trinkets, as did Charles and Ray Eames... and then, somehow backed away from it in later life.

Perhaps it is no coincidence that current British worthies draw attention to the austere position of the Smithsons' 'Without Rhetoric', steeped in

the piety of biscuit-beige, and a penchant for dark stained wood.

Hurrah then, for Mart Stam's attempt to provide a blue house among the white of Stuttgart's Weissenhofsiedlung ... way back in 1927.

Hurrah for the serious-but-naughty example of Sauerbruch Hutton infiltrating various parts of Germany right now, with vibrant but still discriminating colour – especially fine in their Brandhorst Museum.

There is of course the question of the dreaded 'pastel shade'. At best, as seen in the mountainside hues used by Norwegian 'funkis' (functionalist) architects in the 1930s and 1940s. At worst (and we have seen a lot of this recently) when a pale green or pale lilac (and probably slightly curved) wall is introduced to add a touch of 'interest'.

So perhaps we have to come to grips with a new challenge. All of us who design things are beginning to notice how the '1,000,000 colours' that are digitally possible – always end up in a slightly acidic corner of purple-blue-green-acid yellow. So we tone them down. Or you get the 'earthy' brigade emptying a packet of Wiltshire loam all over your desk as inspiration.

We live in a world where chemistry and artificiality exist to challenge the memories of mud and lime and baked clay. Yet colour is there to delight.

Perhaps it is the delight itself that scares us?

Go to architectural-review.com to read the Editor's pick of Peter Cook's columns from the archive, where he compares Suffolk with Dubai, ponders a tricky Dutch conundrum, tells us what makes architecture interesting and who he'd most like to meet.

NEAL FOX

International line-up gathers to debate future of profession

RICHARD WAITE

Given recent world events and the nervousness about the global economy, it was unsurprising that the focus of this year's AR/Protek roundtable discussion at MIPIM was not, unlike at previous events, tall buildings. Instead the international line-up, gathered in March at the property fair in Cannes, debated the future for the architectural profession post-downturn, the unrest in the Middle East, emerging markets and designing sustainable buildings.

Money was the hot topic. According to Ken Shuttleworth of London-based Make, developers were again looking to build projects in the UK capital if nowhere else. He said: 'Since November 2010, things have picked up a lot in London and we are again looking at groundscrappers, such as our scheme at Broadgate.'

Stephen Quinlan of Denton Corker Marshall agreed, and added that the developer interest in the UK was limited 'almost exclusively to London'. Likewise, John Bushell of KPF added: 'Some Saudi investors will only look at certain postcodes in London and Paris.'

Nabil Gholam, of AR Future Project Award-winning Nabil Gholam Architecture & Planning, believed the 'old cities'

in Europe will remain a safe haven for inward investment while uncertainty and revolution spreads through the Gulf and North Africa.

The Lebanese architect said: 'Our two projects in Egypt stopped six months before anything happened. There was no answer on the phone to the clients, one the largest developer in the country, and we couldn't understand why. But they had smelled change. Although everything in our natural market is frozen right now this may be positive for Europe. With this instability there are many potential buyers who would rather go to London.'

However, in contrast to the upheavals that are taking place on its doorstep, Gholam explained that Beirut was 'booming, in the good sense of the word... with property prices rising to crazy levels'.

Meanwhile, Sanjay Puri of Mumbai-based Sanjay Puri Architects has also witnessed 'an insane price escalation' recently in India. He said: 'This time last year, India was booming. Property prices have gone up by 40 per cent – which is too high to be sustained – driven by a lot of foreign investment.'

Puri added: 'Apartments in the Burj Kalifa are cheaper than

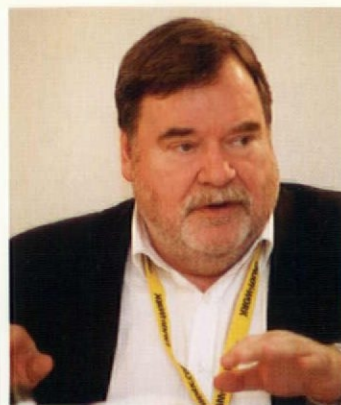
those in Mumbai and Delhi. Now most projects in the larger cities have stopped. Yet there are a whole lot of other cities in India, such as Lucknow, which are undergoing huge amounts of urban renewal.'

The debate moved on to how the sustainability agenda is being delivered in different countries. Putting together a sustainability plan was easier for large-scale masterplans, said SOM's Kent Jackson, whose practice is working on such schemes in China and Vietnam, than when taking a building by building basis. The drivers for 'going green' continues to vary widely across the globe, ranging from legislative coercion in the UK to market demands in Australia.

Gavin Clifford of Cundall explained: 'The low-energy agenda has been led by the end-user in Australia, not by the regulations. There is no equivalent of the UK's Part L there. The UK has fallen into the trap where it won't do anything unless there are regulations. And this legislation only drives the design of buildings, not about how they are used.'

Simon Allford of AHMM agreed, saying the profession in the UK had not taken the lead in the environmental agenda, but rather had been 'dragged kicking and screaming to where we are now by the building regulations and constraints'.

It was suggested these legislative checks could stifle innovation and flexibility for re-use and renewal. Gholam pointed to how new buildings in Qatar, which won the 2022 World Cup, are being designed for multiple uses. He said: 'Every building in the next 10 years will have to be able to be converted to hotel rooms to house the 100,000 people who will be there for the Mondial.'



Above: The Protek roundtable
From the top: Paul Finch; Gavin Clifford (Cundall), Simon Allford (Allford Hall Monaghan Morris); John Bushell (KPF),

Jackie Blanden (WMProtek); Ken Shuttleworth (Make); James Finestone (Arup), Gregoire Zundel (Atelier Zundel Cristea) and Stephen Quinlan



**WORLD
FESTIVAL
OF INTERIORS**

**BARCELONA
2-3 NOVEMBER 2011
INSIDEFESTIVAL.COM**

**COMING SOON!
ENTRIES OPEN
12 APRIL 2011**

**TAKING PLACE
ALONGSIDE THE
WORLD ARCHITECTURE
FESTIVAL, INSIDE
IS AN INNOVATIVE
NEW FESTIVAL THAT
CELEBRATES THE
GREATEST INTERIOR
DESIGN IN THE WORLD,
PITCHING LEADING
NAMES AGAINST EACH
OTHER TO WIN WORLD
INTERIOR OF THE YEAR.**

Don't miss the chance to put your work in front of designers at the top of their game, and schmooze with the best at this unmissable new event.

To register your interest, email info@insidefestival.com, quoting your VIP code ARAD1.

INTRODUCING... TRIFLOW QUADRO

The world's first tap to deliver not only hot, cold and filtered water, but also filtered water heated to 98°C, through a dedicated waterway, from the same spout.

Fusing elegance and style with technological innovation, Triflow Concepts offers the Triflow Quadro System in a range of mechanical as well as electronic models.



 TRIFLOW CONCEPTS BACK TO TAP

TEL: 0845 313 5000 • WWW.TRIFLOWCONCEPTS.COM

PROUD SPONSORS OF THE AR AWARDS FOR EMERGING ARCHITECTURE 2010



LONDON, UK

AR House celebrates innovation and excellence in modern house design

www.arhouse.co.uk

AR House 2011 is now open for entries. This new award for the best one-off house was launched last year, and its inaugural cycle attracted over 200 entries from around the world. Last year's winner was the House of Balls in Ahmedabad by Gurjit Singh Matharoo, a delightful essay in economy and sensuality, which proved that genuine innovation does not require vast budgetary resources.

In the history of architecture, the private house occupies a unique position. Beyond its core function of shelter, the house is an object of fantasy, a source of delight, a talisman and a testing ground for ideas. Where would modern architecture be without the Villa Savoye or the Tugendhat, Schminke and Farnsworth Houses? All were calls to arms on a long hard road of discovery and experimentation that not only changed ideas about the modern house, but also had a wider cultural resonance.

The house is also the one commission that virtually all architects tackle at some stage in their careers, so AR House has no age limit and a generous prize fund of £10,000. Only built projects are eligible, and winning and commended schemes will be published in a special issue of the AR. **For details on how to enter, go to www.arhouse.co.uk. The closing date for submissions is Monday 23 May.**



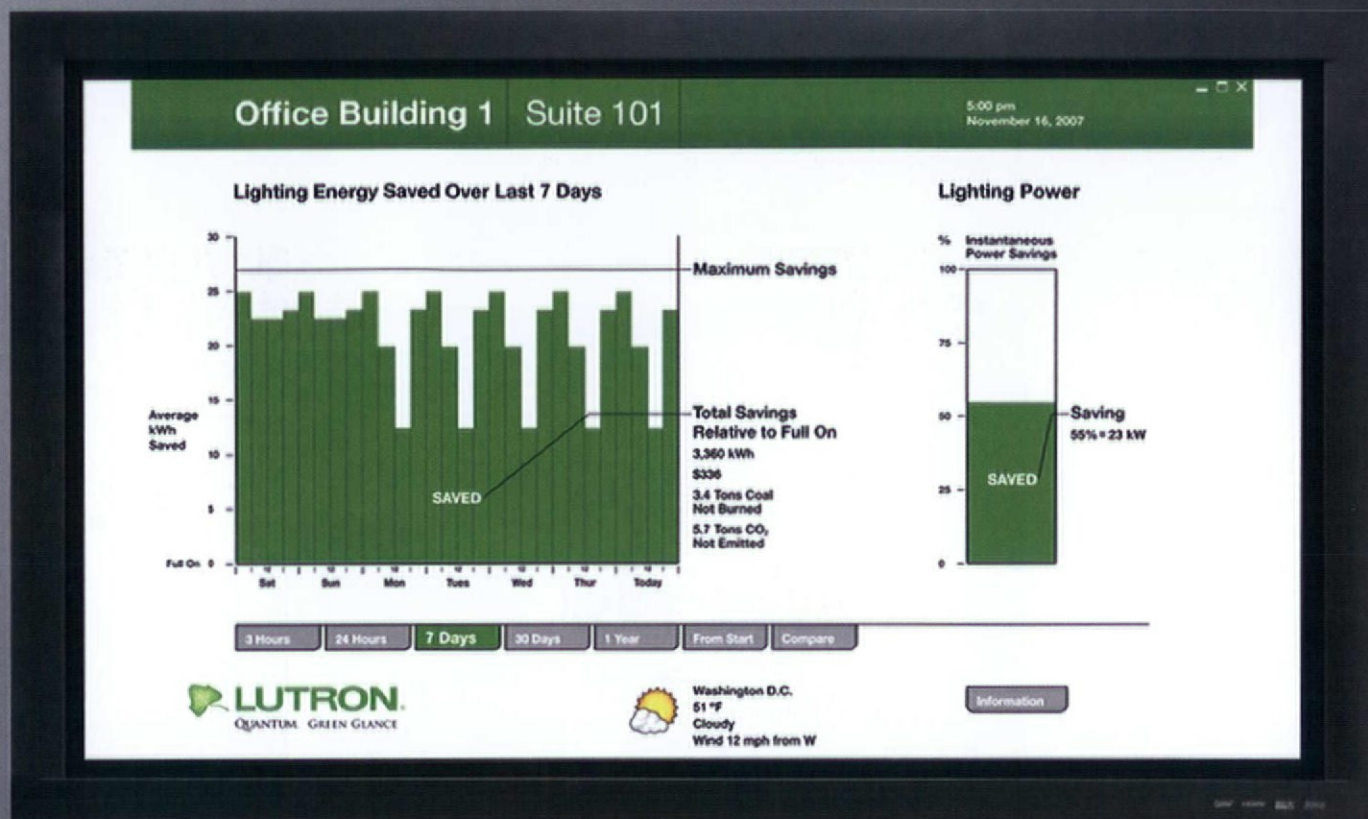
Left_ Passage House by TNA in Nagano, Japan, an inventive weekend retreat
Below_ House with Balls in Ahmedabad,

by Gurjit Singh Matharoo, last year's overall winning project
Bottom_ Pittman Dowell Residence in Los Angeles, by Michael Maltzan



IWAN BAAH, EDMUND SUMNER, DAICIANO

We dim.



You shine.

Our control systems significantly cut the cost of lighting commercial buildings. Apart from the effect on running costs, saving energy clearly brings benefits to the wider community. To broadcast these benefits, our unique GreenGlance™ monitoring and reporting software allows owners or tenants to demonstrate energy saving in action. Staff, shareholders and other opinion-formers can view, in graphic detail, exactly how the company is reducing its carbon footprint. Corporate responsibility reporting becomes a live, 24/7 event.

GreenGlance is just one of Lutron's new range of energy-saving products for commercial premises. To find out more, visit www.lutron.com/globalenergysolutions or call 020 7702 0657.



BUILDINGS

217

PAGE 048

MUSEUM OF THE HOLOCAUST

LOCATION LOS ANGELES, USA

ARCHITECT HAGY BELZBERG

219

PAGE 062

GALLERIA SOLAR

LOCATION VILA DO CONDE,
PORTUGAL

ARCHITECT
MANUEL MAIA GOMES

216

PAGE 040

BRITISH EMBASSY

LOCATION TBILISI,
REPUBLIC OF GEORGIA

ARCHITECT MICHAEL WILFORD

220

PAGE 066

EIGHT SPRUCE STREET

LOCATION NEW YORK, USA

ARCHITECT FRANK GEHRY

218

PAGE 054

SOCIAL HOUSING

LOCATION MIERES,
ASTURIAS, SPAIN

ARCHITECT
ZIGZAG ARCHITECTURA

216

BRITISH EMBASSY

LOCATION

TBILISI, REPUBLIC OF GEORGIA

ARCHITECT

MICHAEL WILFORD

WRITER

MAX MORAN

PHOTOGRAPHY

DENNIS GILBERT





THE WHOLE RESIDENCE WAS ENVELOPED WITH THIS PATTERNED TREATMENT, TO GIVE IT A REGAL APPEARANCE

Michael Wilford worked with James Stirling for 32 years. Joining as his first full-time assistant in 1960 while still a student, their later partnership stretched from 1972 until the elder man's death two decades later. This month, Tate Britain welcomes visitors to the pair's Clore Gallery for the London leg of James Stirling: Notes from the Archive, the retrospective unveiled at the Canadian Center for Architecture (CCA) in Montreal at the end of last year (AR December 2010). While elsewhere contributors reflect on Big Jim's legacy (see pages 72–81), here we take a first look at the latest of the many subsequent projects from the partnership's other half: the British Embassy in the Georgian capital Tbilisi, completed by Wilford last November.

As the architect explains, the UK Foreign and Commonwealth Office's brief for this new diplomatic outpost was similar to the one given for his design of the British Embassy in Berlin, which opened to millennial fanfare in 2000: 'They wanted a building that was welcoming and represented Britain, but they also needed it to be secure.'

Although it is less grand than the practice's high-profile addition to

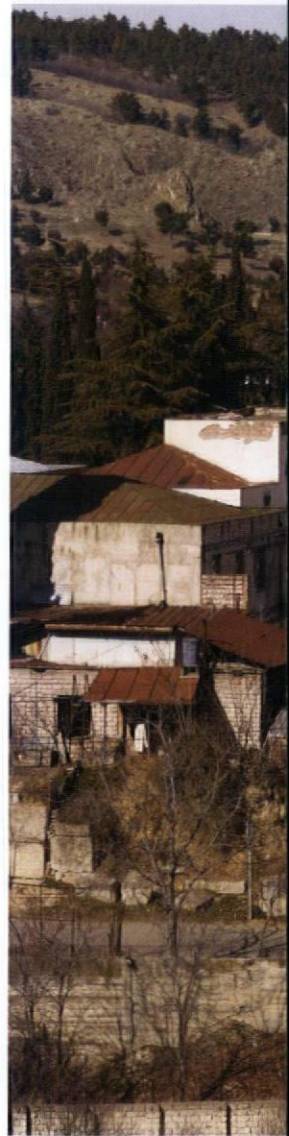
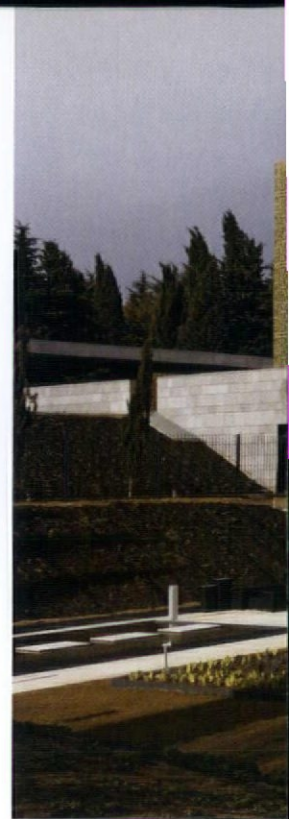
post-unification Germany, the project nevertheless reflects – alongside Tony Fretton's British Embassy in Warsaw (AR March 2010) – a real effort by the British Government in recent, more fiscally flush years, to manifest itself on this important interface between the West and the former Soviet states. But as Wilford explains, there were more prosaic reasons for the move: 'The Embassy was previously camping in a hotel, and it was not suitable in terms of security.'

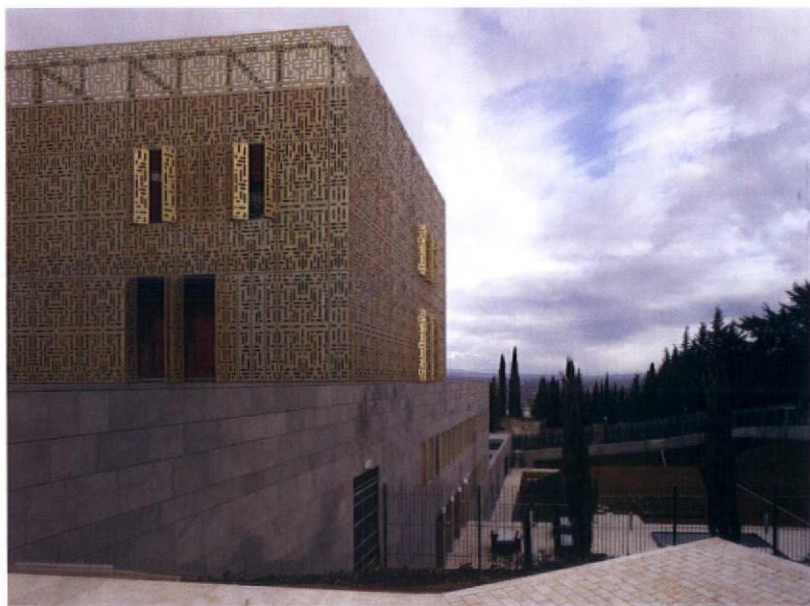
Security has, of course, played a hugely important role in the project's development (the city was invaded by Russia during construction). Though sitting on a charming east-facing slope of the Krtsanisi Hills – with expansive views across the Kura Valley and north over the city itself – the site is inherently vulnerable to attack from its three road-facing sides. These factors have dictated a bomb-blast security perimeter, which has given the building its position and dimensions.

The fourth side is contiguous with a plot that is likely to become another embassy in what would be a small diplomatic quarter. The building is composed of two parts: a stacked stone plinth contains the

embassy, atop of which sits a golden-hued perforated enclosure for the ambassador's residence. This integration of the domestic and the diplomatic programmes is highly unusual – ambassadors don't usually live 'above shop' – and Wilford was keen that this unique arrangement should be expressed.

'Externally the embassy is all surfaced with basalt stone, which is used for the pavements and building plinths in Tbilisi, but the residence had to be distinguished from this,' says Wilford. 'There is a regional tradition of screening large terraces on houses with elaborate timber panels, and we decided to envelop the whole residence with this patterned treatment, to give it a regal appearance.' For durability the screen is made from metal, and it can fold back around windows to clear privileged stately views for the occupants. Internally, it is a well-ordered, simple plan. All the ceremonial, social and office spaces are aligned around a central atrium, which has a large staircase set on a diagonal. This takes you up to the oak-panelled piano nobile, where there are two cafeterias and a conference room, separated by glazed doors that can slide away —





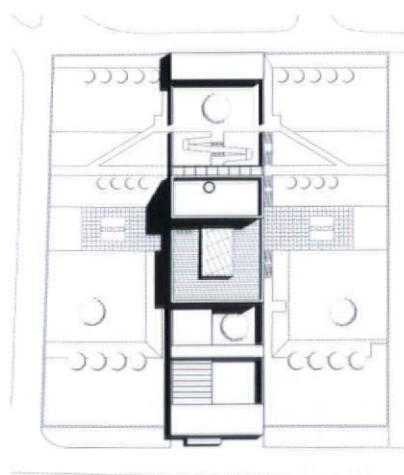
Previous page_ The British Embassy sits on the east-facing slope of the Krtsanisi Hills, gliding over its contours and taking in spectacular views of the Kura Valley and the city beyond
Top_ The stone plinth houses the embassy functions, nestling into the landscape, which has been planted to include a Georgian and English garden at different levels

Above_ The golden-hued enclosure speaks of a tradition of screening large terraces on houses. The integration of diplomatic and domestic programmes is a highly unusual juxtaposition
Left_ The scale and simplicity of the massing takes its cues from the neighbouring buildings

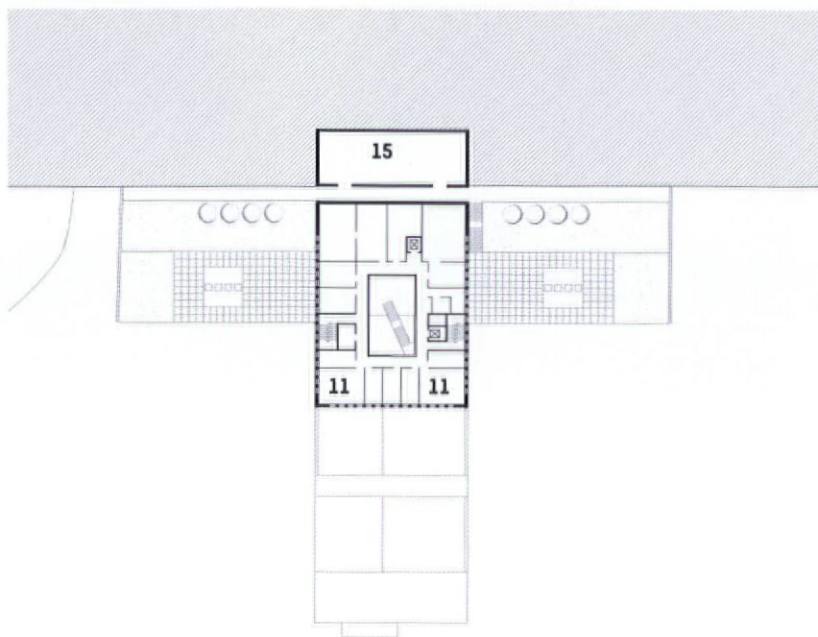
CEREMONIAL, SOCIAL AND OFFICE SPACES ARE ALIGNED AROUND A CENTRAL ATRIUM, WHICH HAS A STAIRCASE SET ON A DIAGONAL

- | | |
|----------------------|------------------------|
| 1 embassy entrance | 12 conference room |
| 2 security | 13 cafeteria |
| 3 consular entrance | 14 services |
| 4 consular courtyard | 15 plant |
| 5 visa hall | 16 residence parking |
| 6 embassy courtyard | 17 residence courtyard |
| 7 visitor parking | 18 reception |
| 8 staff parking | 19 drawing room |
| 9 terrace | 20 dining room |
| 10 atrium | 21 kitchen |
| 11 offices | 22 private apartment |

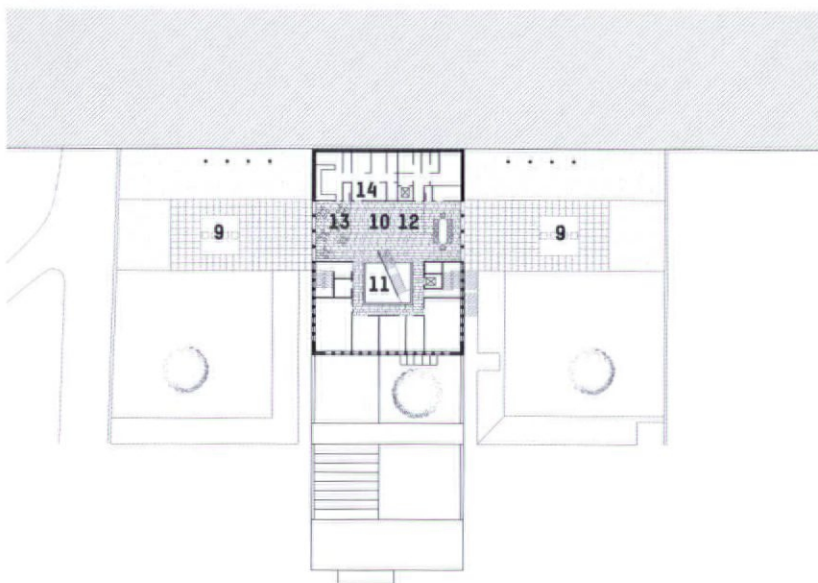
site plan



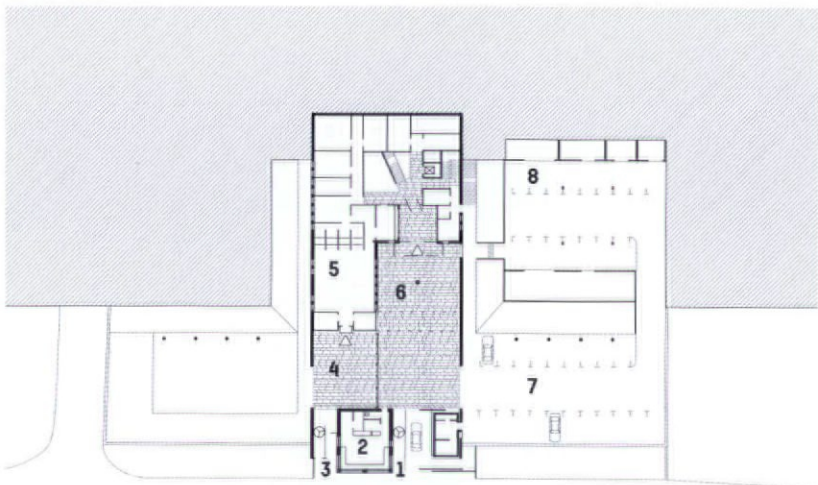
second floor



first floor

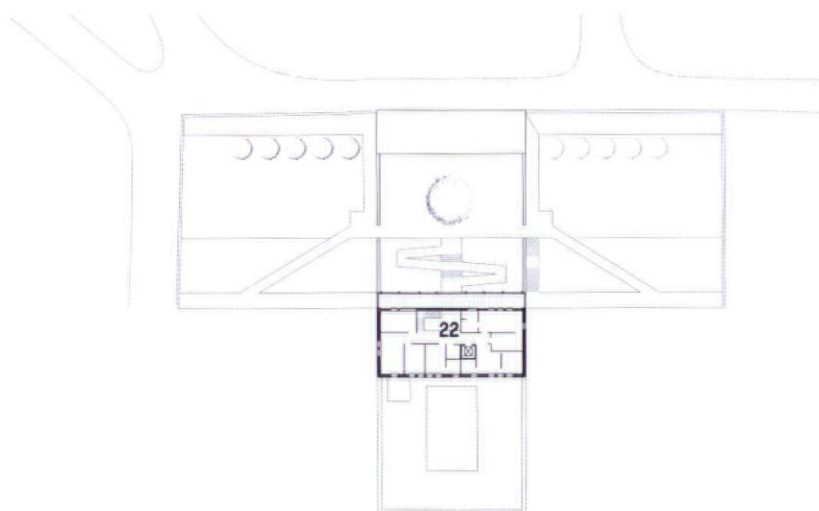


ground floor





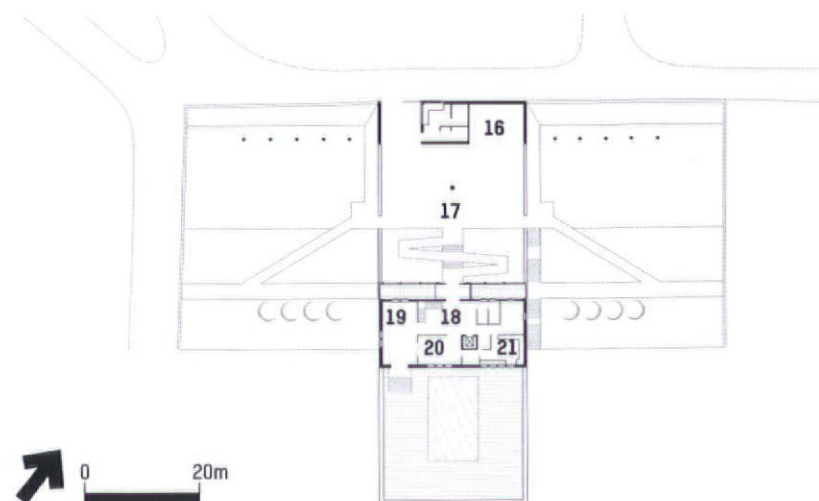
fourth floor




Above_ The Ambassador's residence is entered from the rear, through its own courtyard; the golden veil shields private terraces and can fold back to reveal windows

to create a large space for receptions. At either end, doors open on to cross-axial terraces. While the ambassador's residence is connected to the embassy (through a minuscule lift), it is oriented in the opposite direction with its entrance to the rear. Even though the residence is not as salubrious as other ambassador's pads – Paris, say – it offers handsome accommodation, a private study, and, from the private west-facing balcony in particular, spectacular views across the city and beyond.

third floor



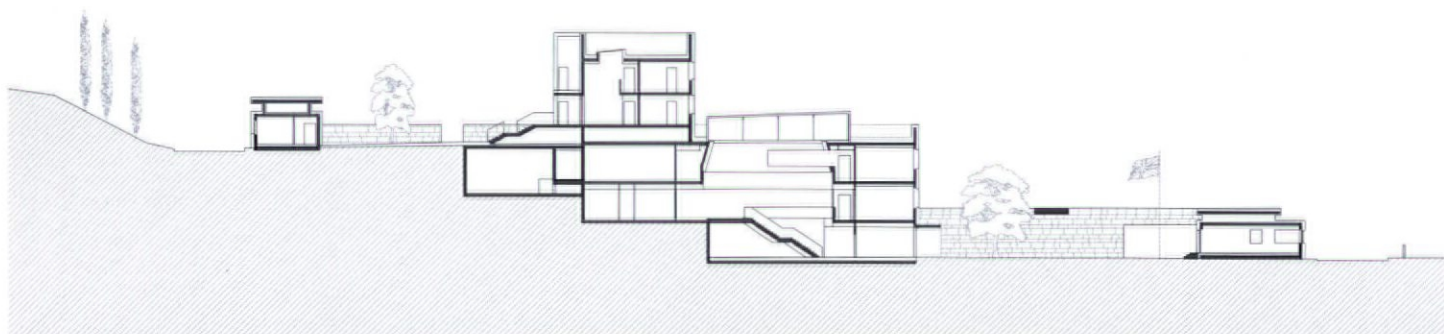
As Wilford reflected in the AR special issue published shortly after Stirling's death (AR December 1992): 'Our constant objective has been to enhance the life and work of the people who experience our buildings – to stimulate, to invigorate, to relax, to offer variety and choice.' The British Embassy in Tbilisi is a solo rendition that expands and evolves the decades-long dialogue between the two partners; a building that departs from and returns to these shared architectural pursuits. It is a testament to Wilford's continuing abilities to deliver dignified and surprising public buildings; and, likely as not, a memorial to the last phase of British Embassy building, before all the money ran out. 

A STONE PLINTH CONTAINS THE EMBASSY, ATOP OF WHICH SITS A GOLDEN-HUED ENCLOSURE FOR THE AMBASSADOR'S RESIDENCE

Below_ Some of the external spaces are enclosed to read almost as interiors, in contrast to the expansiveness of the landscape
 Right_ Centred on the main axis, the atrium is the primary organisational gesture of the building project

ARCHITECT
 Wilford Schupp
 Architekten, Stuttgart
STRUCTURAL ENGINEERS
 Boll and Partner, TPS
SERVICES ENGINEERS
 JMP, Ramboll UK
LANDSCAPE ARCHITECT
 Glück + Jetter

long section





217

MUSEUM OF THE HOLOCAUST

LOCATION

LOS ANGELES, USA

ARCHITECT

BELZBERG ARCHITECTS

WRITER

MICHAEL WEBB

PHOTOGRAPHY

IWAN BAAN

As the Holocaust recedes into the past, there's an ever-stronger urge in Europe and America to memorialise the horrors and draw lessons from that shameful era. The Los Angeles Museum of the Holocaust provides a permanent home for an institution that was established in the 1960s by a group of camp survivors. A core collection of photographs and memorabilia was displayed in a rented office space, and a memorial of six black stelae was built at the edge of a mid-town park.

Belzberg Architects was commissioned to design a building, but chose instead to embed the galleries within a corner of the flood-control berm that surrounds the park, separating the museum from the post office and shopping mall that flank the site. A path leads to the memorial across a roof planted with wild grasses and defined by low retaining walls that mirror the winding paths of the park. A ramp leads down from the drop-off point for school buses to the entrance and the story of a culture uprooted and extinguished unfolds in a succession of displays that loop round the ramp.

As Hagy Belzberg explains, 'we wanted to maintain the open green space and realise an allegory. As you


leave the sights and sounds of the world above, you unearth the atrocities that were ignored by people who lived close by in those times, just as we choose to look away from instances of genocide today.'

Descending into the earth can be a powerful experience, as the Vietnam Veterans Memorial in Washington, DC, and the Monument de la Déportation in Paris show in different ways. Daniel Libeskind simulates that journey in the Berlin Jewish Museum (AR April 1999), but his geometries are derived from points in the city – an intellectual construct that is self-sufficient. Belzberg's geometries are pragmatic, and his interior is expressive but deliberately understated.

He wanted to provide a container that would subtly intensify the story, rather than abstracting camp architecture, as James Ingo Freed did in the US Holocaust Museum (AR February 1994). He achieves this by twisting and bending the structural columns, creating organic shapes that relate to the park, but also suggest a disordered world. The monopitch roof over the first sequence of galleries pulls in natural light from a row of openings at the top and from the expanses of fritted

glass to either side of the ramp. The roof tilts down almost imperceptibly, so that, as you reach the darkest part of the story, you feel confined within a low-ceilinged space. As you return along the other side of the ramp, compression gives way to release.

These shifts of height and lighting reveal how Belzberg has integrated container and story in a cinematic fashion. He has employed interactive digital displays, still and moving images, and reports from local newspapers to engage the attention of students of many nationalities, for whom this story must appear as remote as the Black Death. Kids pick up earphones and iPods at reception, allowing them to reach out to individuals and construct their own narratives. At the end of the circuit, in a space that opens out of the foyer, survivors who volunteer as docents provide a reality check, recalling what happened 60 years ago when they were the same age as their audience. From here, steps lead out to the park, the memorial and an enclosure of concrete blocks, pierced with holes of different sizes that symbolise the 1.2 million Jewish children who died in the Holocaust. In an evocation of the Western Wall, students write notes on scraps of paper and push them into the holes.

Belzberg was challenged to create the museum on a confined site and the tight budget had to cover the cost of excavating to a depth of 11m, mitigating emissions of methane gas, and constructing a vast concrete shell to withstand pressure from the high-water table. For the visible concrete structure, the builders sprayed shotcrete onto reinforcing rods and trowelled the surfaces, rather than pouring concrete into forms, to achieve fluid curved shapes. They are modelled in natural light that bathes the open and office areas, shifting through the day. Much of the cement was recycled, while the green roof provides insulation and filters the rainwater, making the museum a model of sustainability, as well as a powerful visitor experience. 



**A PATH LEADS TO THE MEMORIAL
ACROSS A ROOF PLANTED WITH
WILD GRASSES AND DEFINED
BY LOW RETAINING WALLS**



site plan





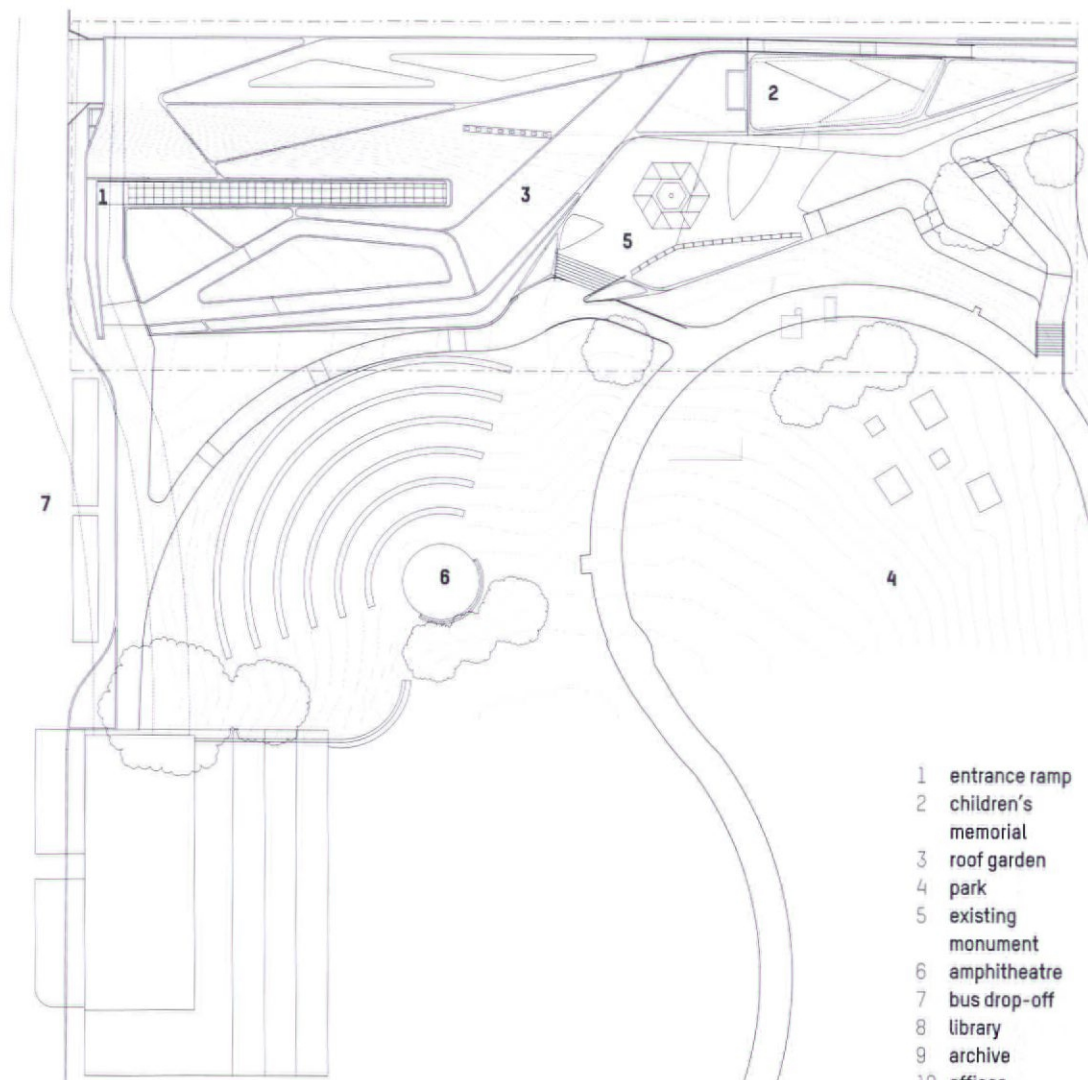
Previous page_

A long ramp descends into the museum through a landscaped and bermed roof

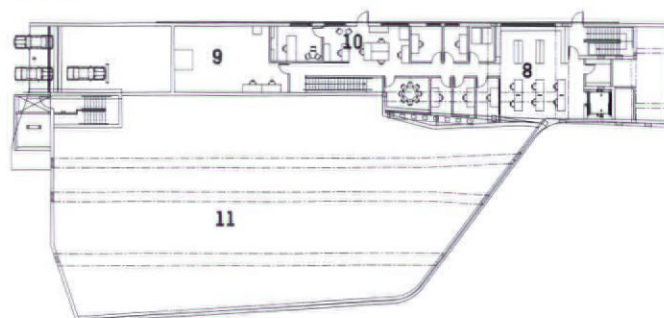
Above_ Crossed with a network of paths, the green roof forms an extension to the park

Left_ From the park, the museum reads as a kind of softly contoured bunker

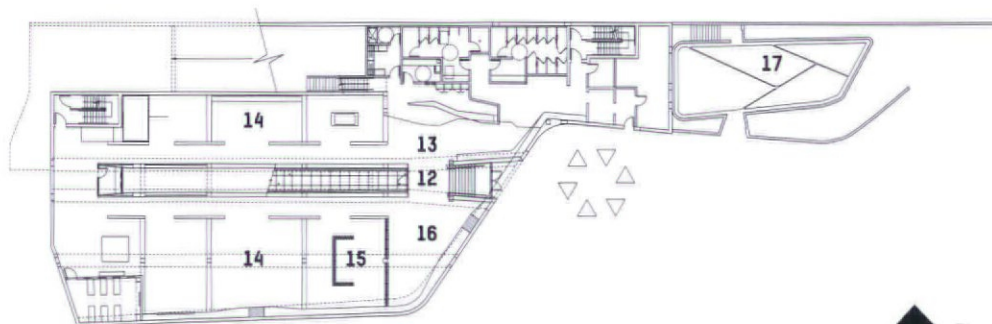
Bottom_ Enclosed by translucent glass walls, the ramp penetrates into the main gallery space



roof plan



mezzanine level plan

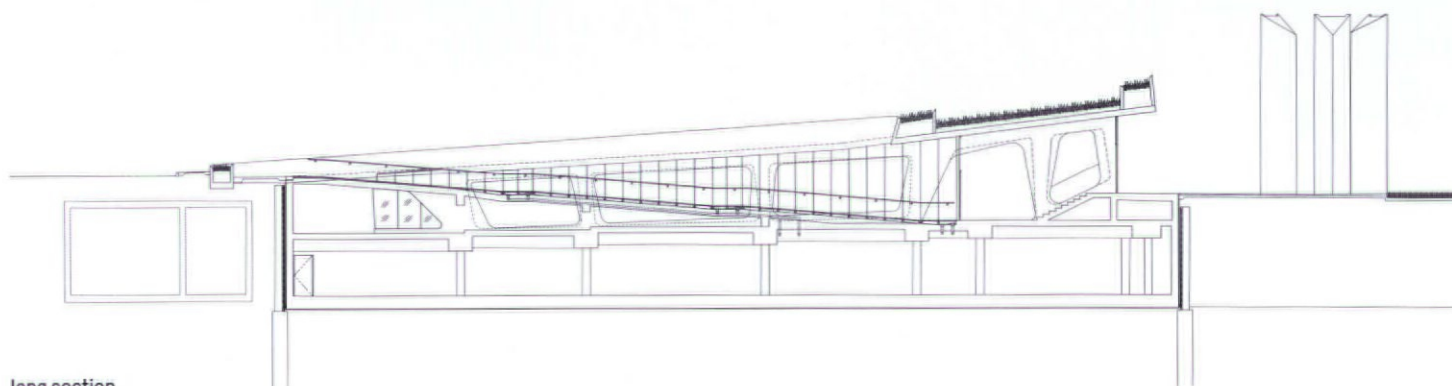


ground-floor plan

- 1 entrance ramp
- 2 children's memorial
- 3 roof garden
- 4 park
- 5 existing monument
- 6 amphitheatre
- 7 bus drop-off
- 8 library
- 9 archive
- 10 offices
- 11 gallery below
- 12 entrance
- 13 foyer
- 14 main gallery
- 15 rotating exhibition space
- 16 survivor presentation room
- 17 children's memorial



**THE ROOF TILTS DOWN ALMOST
IMPERCEPTIBLY, SO AS YOU
REACH THE DARKEST PART OF
THE STORY, YOU FEEL CONFINED**



long section





Above_ Resembling the skeleton of some primeval behemoth, the organic structural form relates to the park setting, but also suggests a disordered world
 Far left_ Entrance foyer with steps leading up to the entrance on the park side
 Left_ Black framed vitrines containing exhibits are set against the cool, neutral interior
 Bottom_ Main exhibition space

ARCHITECT
 Belzberg Architects,
 Los Angeles
STRUCTURAL ENGINEER
 Risha Engineering
MECHANICAL ENGINEER
 John Dorius & Associates

218

SOCIAL HOUSING

LOCATION

MIERES, ASTURIAS, SPAIN

ARCHITECT

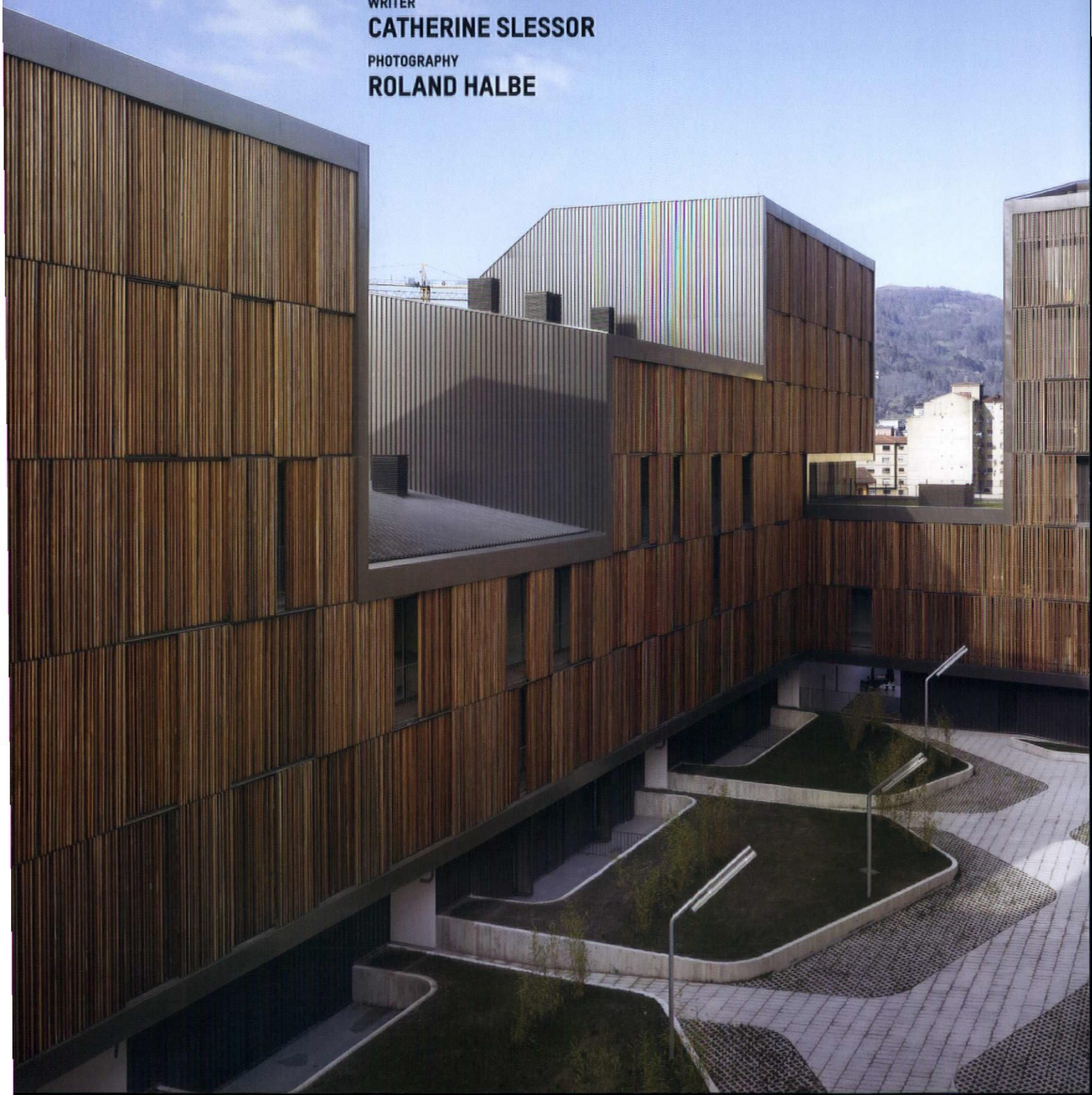
ZIGAZAG ARQUITECTURA

WRITER

CATHERINE SLESSOR

PHOTOGRAPHY

ROLAND HALBE





ALTHOUGH THE COMPLEX IS
NEWLY COMPLETED IT HAS THE
HUGGER MUGGER CHARACTER
OF A HISTORIC CLUSTER



Previous page_ The paved and landscaped courtyard at the heart of the block
 Left_ The housing is a pioneer in an urban redevelopment zone. The scheme is awaiting a strip of shops at street level as the neighbourhood is pieced back together
 Left, bottom_ Cuts and clefts in the block open up views to the hills and beyond
 Bottom_ One of the entrances to the courtyard



The courtyard block, that most enduring of urban housing types, gets an incisive twist in this new scheme by the young Spanish partnership of David Casino and Bernardo Angelini. Based in Madrid, the pair operate under the collective identity of Zigzag Arquitectura, but the whacky nomenclature should not be misconstrued, since there is a strong and serious intelligence at work, which is evident in the elegant deconstruction and transformation of a conventional brief for 131 apartments into an urban enclave rich in spatial, social and material possibilities.

The site lies in the centre of Mieres, a small town in the Asturias region of northern Spain. Hobbled by a declining legacy of mining and heavy industry, the town has a resigned and crepuscular air as it attempts to redefine itself for the post-industrial era. Along the coast in the Basque country, Bilbao is still the supreme galvanising exemplar of civic transformation. Meanwhile, Mieres lies deep inland and is unlikely to feature on anyone's short break radar. Compacted into a valley landscape of sylvan hills, the urban grid is extruded along the flat flood plain of the Caudal River. At each end, its dense core tapers off into a featureless straggle of business parks and factories.

Just south of the centre lies a major redevelopment zone, with several empty sites awaiting the impetus of new buildings and uses. The winning proposal in a competition staged by the municipality, Zigzag Arquitectura's scheme is a pioneer in this slightly forlorn wasteland, combining apartments of varying sizes (from one to four bedrooms) with commercial and retail space at street level to reanimate the wider public realm.

While it is set within our urban confines, the site has views up to the hills and a more bucolic idyll beyond the flood plain. 'Our aim was to recover this double quality of place,' says Zigzag partner David Casino,

'making the project simultaneously urban and rural. We proposed a return to the origins of the site. It's an urban room with fragmented borders, enclosing an inner world that evokes fields that can no longer be seen.'

The starting point is a generic courtyard block, which is then ruptured and reassembled. Defining a street edge and central courtyard, the block occupies the same footprint as a conventional orthogonal one, but the fragmented structure generates a more multi-faceted composition of irregularly stacked forms, rather like a child's building blocks. A shifting, angular geometry of canted roof planes adds a further layer of convolution and interest.

Although the fact the complex is newly completed, it has that hugger mugger character of a historic cluster of structures that has evolved over time. This serves to humanise what could have been yet another large and anonymous residential block. 'We wanted the building to connect with the environment,' says Casino. 'The block is penetrated by voids and cuttings which frame views of the mountains and fragments of the Asturian landscape beyond.'

Contrasting facade treatments emphasise the distinction between public and private realms. Presenting a more impervious and enigmatic face to the city, street sides are wrapped in a dark carapace of ribbed metal cladding that evokes the town's industrial past. Inside, courtyard elevations are glazed and veiled by a rustic timber lattice made from thin vertical strips of *elondo*, a chestnut-hued African hardwood. Like a modern *mashrabiya* screen, this movable timber veil encloses narrow balconies connected to the living spaces of each apartment.

'On the courtyard side we searched for a rural reference,' says Casino, 'symbolising a return to nature. The enclosed balconies recall the Asturian traditional porch and the use of wood reminds us, through its vertical rhythms, of the forests of the nearby mountains.' —

**PLANTED WITH NATIVE
GRASSES AND BAMBOO,
THE COURTYARD FORMS
A SECRET URBAN GARDEN**

location/site plan



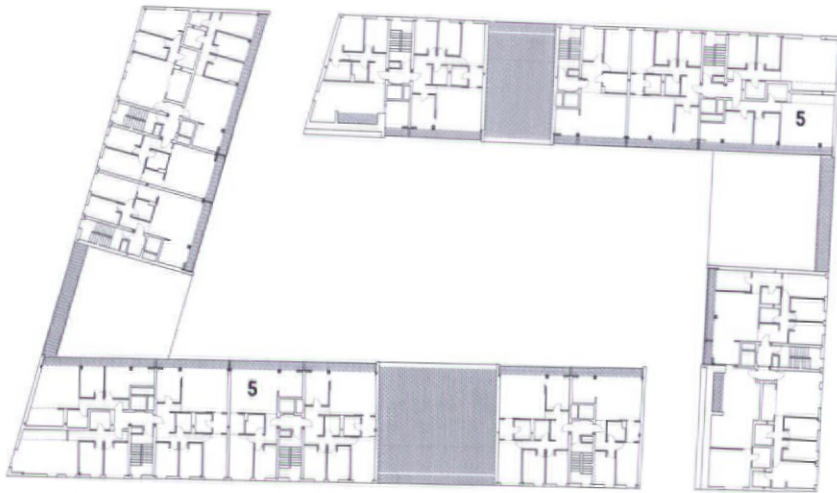
- 1 street entrance
- 2 courtyard
- 3 shops
- 4 stairwell
- 5 apartments



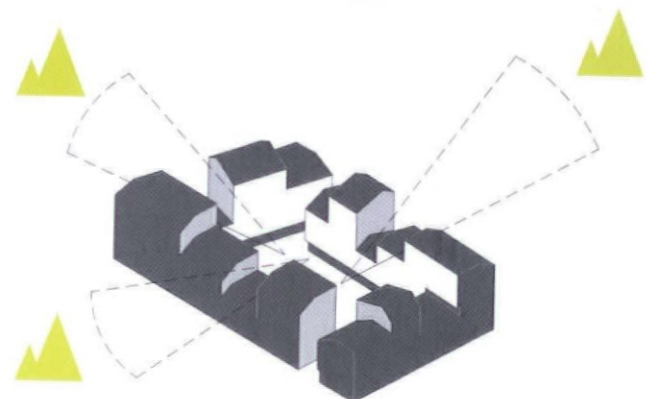
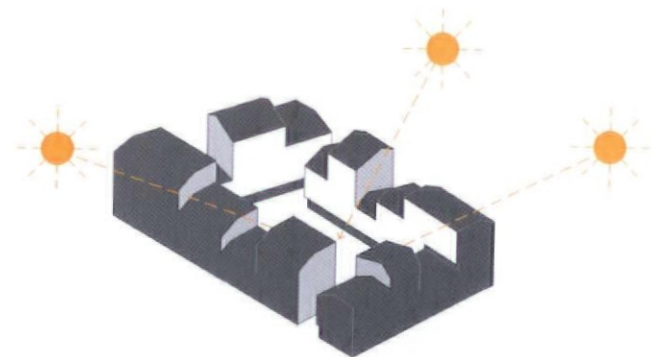
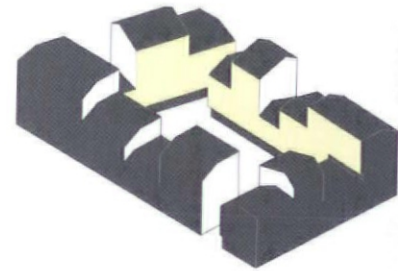
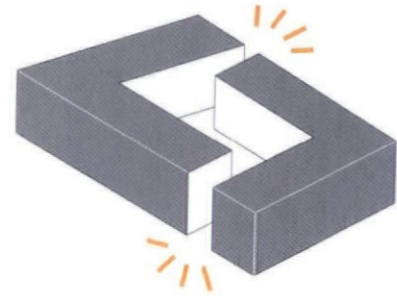
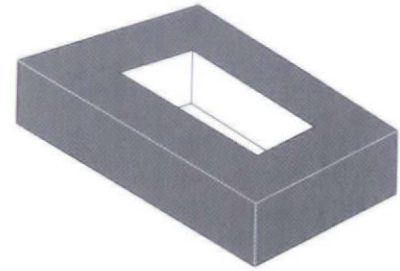
Above_ Elegant modern graphics indicate the entrances to the stairwells from the courtyard
Right_ Wrapped in a dark skin of corrugated metal, street facing elevations are more impervious



third-floor plan



evolution of form



first-floor and second-floor plans



ground-floor plan



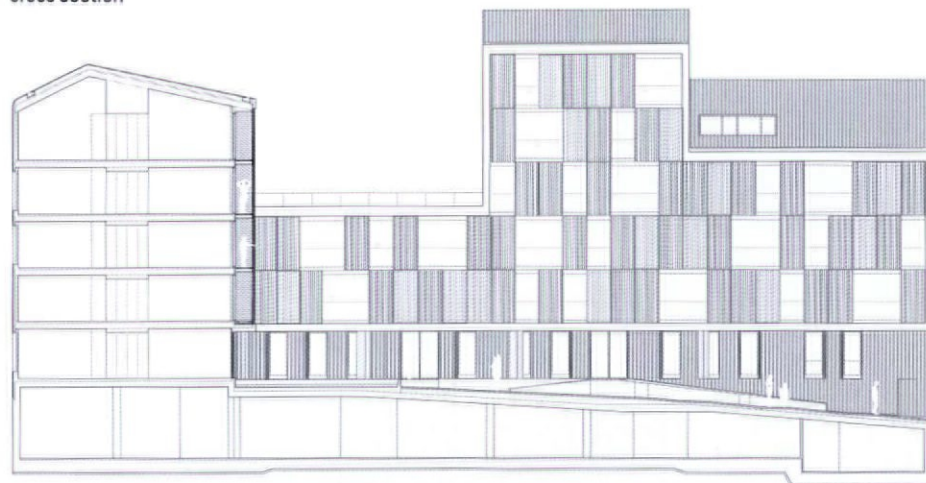
**COURTYARD ELEVATIONS ARE
GLAZED AND VEILED BY A
TIMBER LATTICE MOVABLE
LIKE A MASHRABIYA SCREEN**



long section



cross section




Above_ Narrow balconies extend the living spaces and recall traditional Asturian porches
Bottom_ The rustic timber screens filter the sun's intensity and cast rippling shadows though the interiors

ARCHITECT
Zigzag Arquitectura, Madrid
TECHNICAL ARCHITECT
Alberto López Díez
STRUCTURAL ENGINEER
Jesus Hierro



The timber screen tempers the sun's intensity and casts rippling shades around the interiors. This play of metal and timber, dark and light, coolness and warmth conjures an evocative duality. In some ways the block resembles a geode, its dull outer layer of metal cladding fractured and split to reveal a sensual, shimmering core of ribbed timber screens, glass walls and a landscaped courtyard in the Iberian tradition of the patio. Planted with native grasses and bamboo, the courtyard forms a secret urban garden at the heart of the block, with a subterranean level of parking stashed neatly underneath. Open at two corners to articulate a diagonal through route from the surrounding streets, the semi-public courtyard is a place of encounter and activity, a stage set for the quotidian dramas of the residents' lives. 'We wanted to avoid turning the courtyard into a neglected back area', explains Casino.

Accessed off a series of spinal staircases, flats are compactly and economically planned. Each is organised around a central core of bathrooms and storage that separates the apartment into day and night spaces. Living rooms overlook the courtyard, connecting with the more intimate and particular world of the block, while bedrooms face the street and the wider urban surroundings. The basic bedroom module is 2.6m wide and this doubles to form a living room. Larger flats have the indulgence of en suite bathrooms while sliding doors optimise circulation and the enclosed balconies extend and amplify living spaces. All this was achieved on budget of €10.6 million, which works out at €595 per square metre, just below average for this type of programme and building type. Yet despite the constraints of resources and context, Zigzag's scheme is alert to the transformative potential of architecture, making for a lively contemporary variation on the familiar repertoire of the courtyard block. 



219

GALLERIA SOLAR

LOCATION

VILA DO CONDE, PORTUGAL

ARCHITECT

MANUEL MAIA GOMES

WRITER

CATHERINE SLESSOR

PHOTOGRAPHY

FERNANDO GUERRA





A wall of coloured translucent glass adds an exuberant flourish to this project for an arts centre in the heart of Vila do Conde, just north of Porto. And while Manuel Maia Gomes' architecture of weight and sobriety might bear all the reductivist hallmarks of the Porto school, the vividly hued glass marks it out as something else; something more nuanced and complex.


To some extent, the brief was not about new architecture per se, but the repair and reconstitution of the urban fabric in the town's historic centre. The Galleria Solar specialises in cinematic art, video and short films, and operates a small bookshop. Gomes was asked to refurbish a building dating from the 16th century to house the Galleria, along with two floors of student accommodation. He also had to devise a linking structure running from the gallery to an adjacent square, in order to encourage a flow of visitors, while reconciling a height difference of some 8m between square and gallery.

Enclosed by thick walls of dark pink concrete, the simple geometry of the linking structure has a powerful monolithic quality. Essentially a space of transition, with a long staircase running through it and a lift housed in a cylindrical volume, it becomes an event in itself, an ad hoc exhibition space for paintings, sculpture and video arts. 'In this way people meet art', says Gomes, 'when simply walking through the city.'

The passage remains open from early morning until midnight, and openings cut into its thick walls frame glimpses of the town. Glowing with a jewel-like clarity, the wall of coloured glass bathes the space in a tranquil light, like the stained glass window of a medieval cathedral. The luminous wall attracts visitors into the building; a literal light at the end of the tunnel. 'The presence of the coloured glass also helps to finesse the transition between the historic house built of stone and the linking structure made of pigmented concrete', says Gomes.

'Both the stone and concrete are rough and untreated revealing the imperfections of their making'.

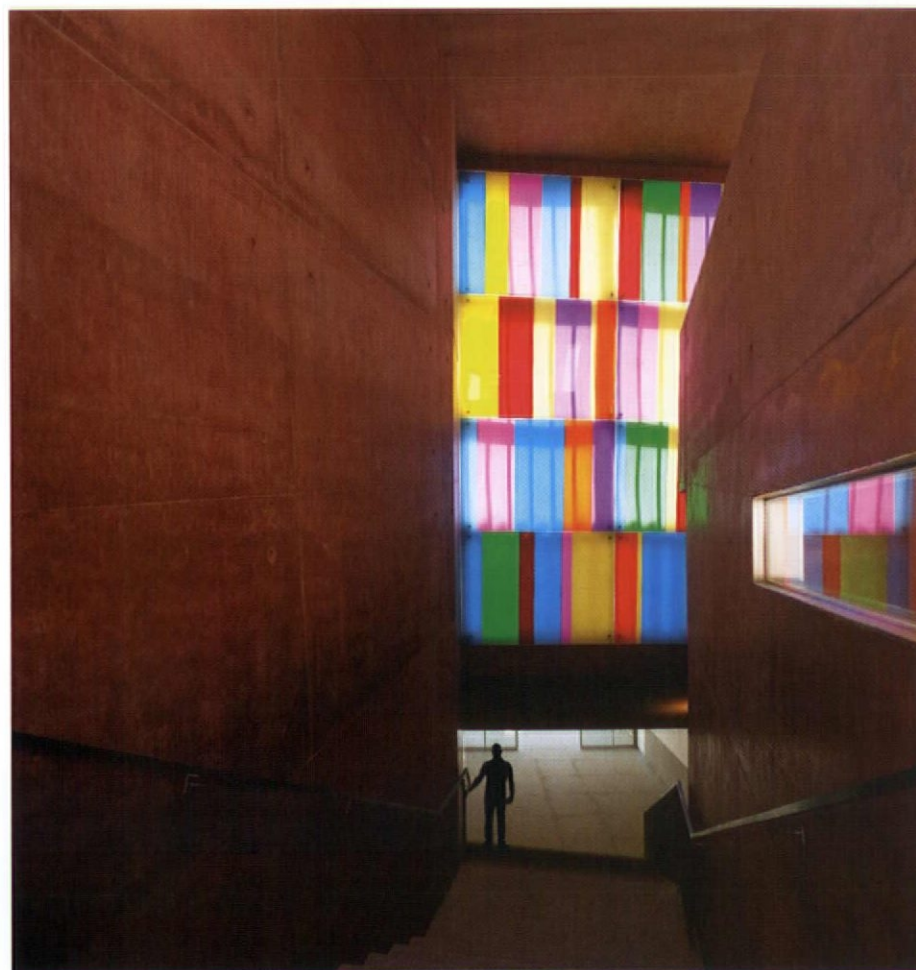
At its upper level the passage connects with the foyer of the gallery. The original 16th century building had been compromised by an insensitive 18th century reworking. So Gomes employs series of tactful, low-key insertions to extol what is left and re-exposes the building's thick granite walls. The gallery is contained in an enfilade of spaces around a central lightwell, while the cells of student accommodation on the two upper floors have a monastic air with timber floors and white walls. A conical light scoop is thrust through building, illuminating the stairwell leading up to the residences.

Although the photogenic glass wall, has inevitably become emblematic of the project, Gomes' approach is more thoughtful and resonates more deeply with time and the city than this ostensible preoccupation with surface and colour would suggest. 

GLOWING WITH A JEWEL-LIKE CLARITY, THE WALL OF COLOURED GLASS BATHES THE SPACE IN A TRANQUIL LIGHT

Previous page, left_ The monolithic form of the linking structure is a powerful addition to the town's historic core
Previous page, right_ Transition between the refurbished gallery and the

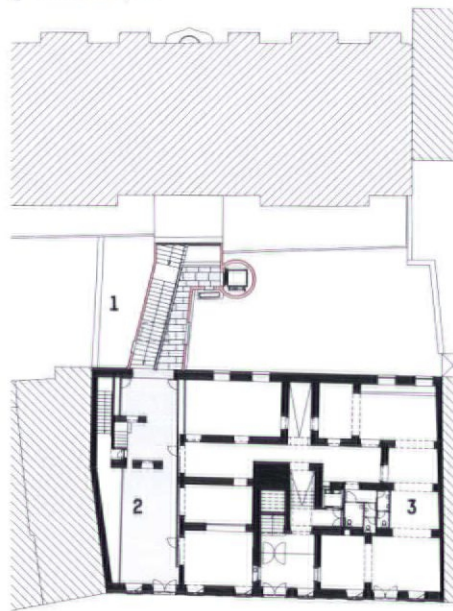
new passage
Below_ The jewel-like window animates the space
Right_ Part of the student residences on the upper floors
Right, bottom_ A conical light scoop shafts through the old building



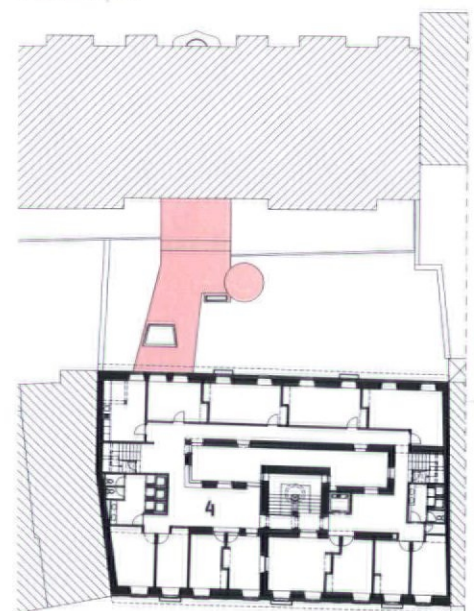
- 1 linking structure
- 2 gallery foyer
- 3 gallery spaces
- 4 student residences



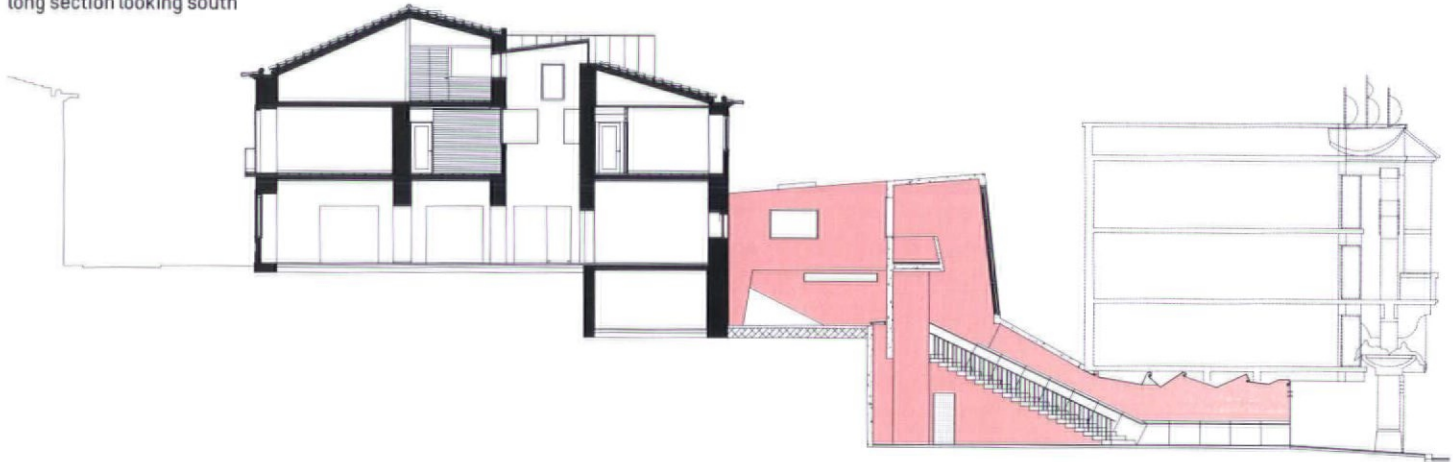
ground-floor plan



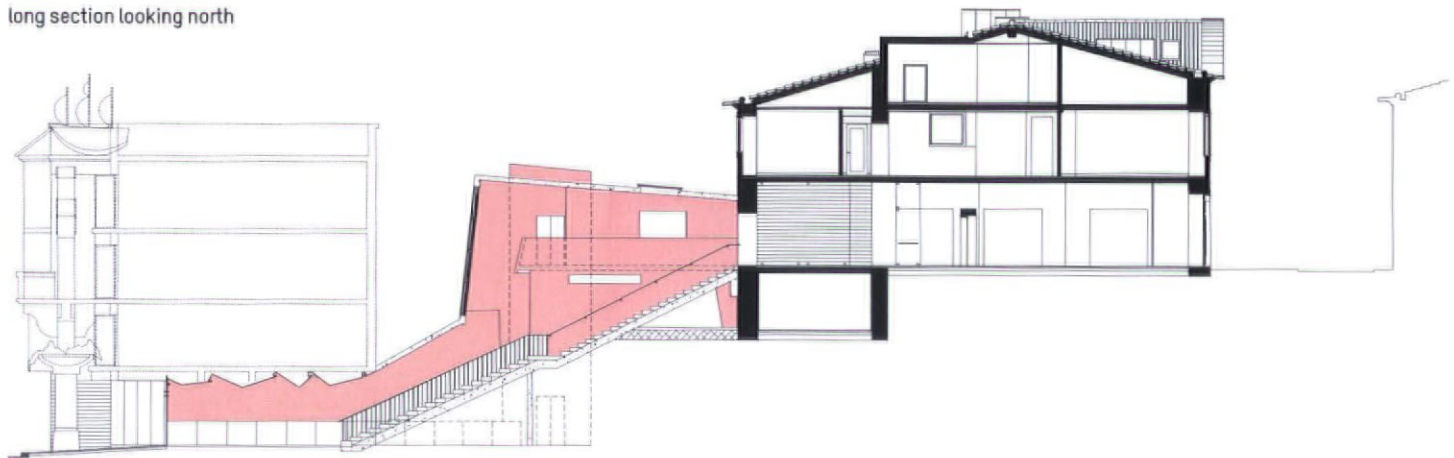
first-floor plan



long section looking south



long section looking north



220

EIGHT SPRUCE STREET

LOCATION
NEW YORK

ARCHITECT
FRANK GEHRY

WRITER
MARK LAMSTER

PHOTOGRAPHY
PIOTR REDLINSKI

Here in New York, there's a tradition of branding apartment buildings with somewhat ludicrous aspirational titles, often of British origin: The Claridge. The Ascot. The Dorchester. I was raised, and my parents still live, in a brown-brick tower called the East View House, never mind that the building has windows looking out to the north, south and west, and an immense blank wall facing in the titular direction. We are, no question, a city of *arrivistes*.

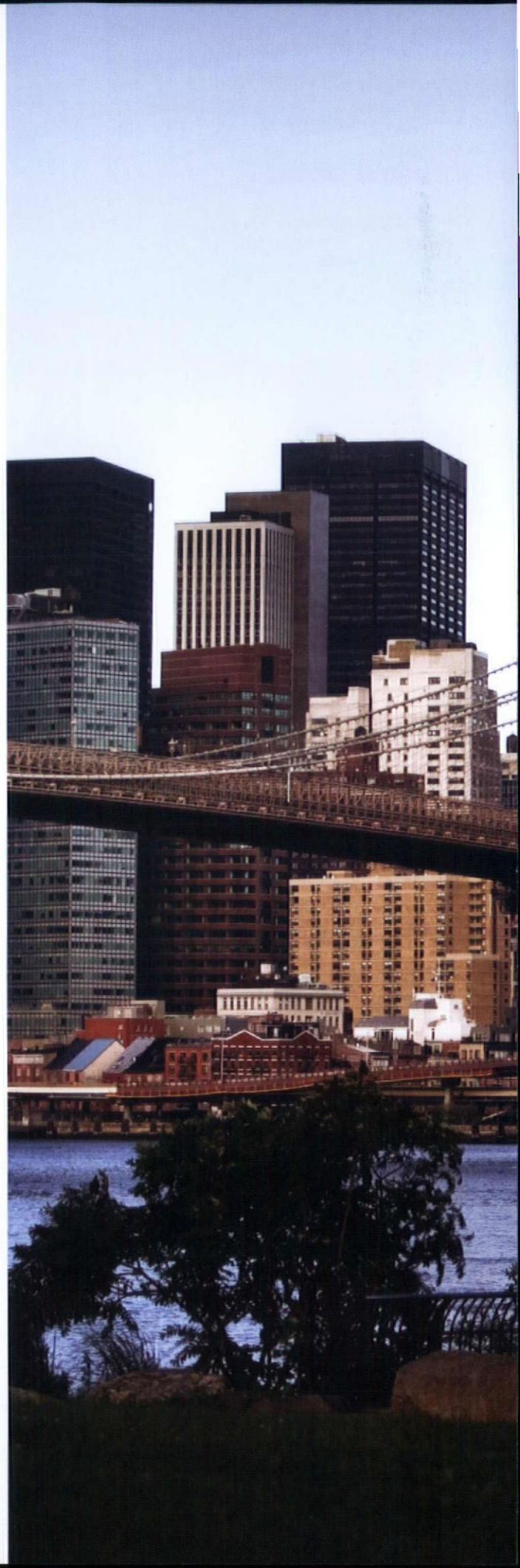
In the annals of this history, however, there has never been anything quite so absurd as the christening saga of Frank Gehry's new luxury residential tower that stands at the foot of the Brooklyn Bridge in Manhattan. This 76 storey spike began life as the Beekman Tower, but for reasons unspecified – either confusion with the uptown enclave of Beekman Place or the taint of its construction history – the developer, Forest City Ratner,

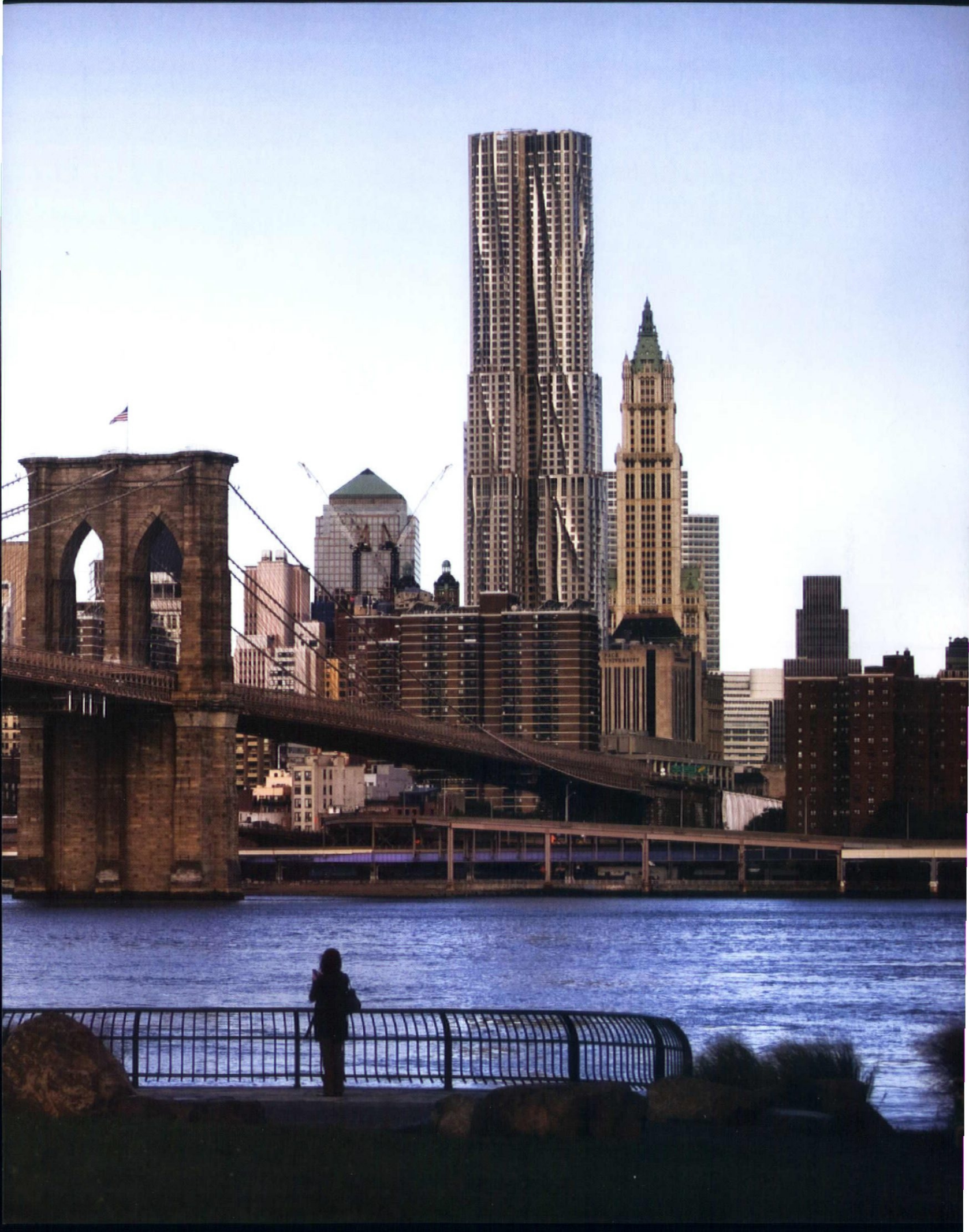
has chosen to rename the tower by its address, 8 Spruce Street.

This is how the city's old money buildings on Fifth and Park Avenues do it – the more anonymous the better, thank you. However, the strategy proved to be a little too self-effacing for the developer's sales team, which landed on a more maximal location, with its numeral spelled out: New York by Gehry at Eight Spruce Street.

The name is unprecedented, and so has been the marketing blitz attendant with the tower's public unveiling in March. I can't think of another development with a film trailer, which can be viewed at www.newyorkbygehry.com.

'The tallest residential building in the western hemisphere, by the world's most celebrated living architect,' reads the advertising copy. Gehry, throughout, has been a visible component of the tower's promotion, even standing for an extended interview in *Playboy* magazine. —





SHEATHED IN TORQUED PANELS OF STAINLESS STEEL, THE TOWER SPEAKS TO A CLIENTELE WITH A BULLISH SENSIBILITY

Previous page_ From across the Brooklyn Bridge, Gehry's new skyscraper is a spectacular sight
Above_ The tower jostles for space among the city's high rises
Below_ Erupting from the Lower Manhattan skyline, the tower rises high above the Woolworth Building

In this article, he declared, 'I hate the celebrity architect thing.'

The *Playboy* reader of Hugh Hefner's imagination – that is, a virile young Wall Street bachelor with a taste for the good life – would appear to be the target demographic for the building's 903 rental units. New York by Gehry is being sold not so much as a building, but as a lifestyle, with a range of amenities. These include a skylit swimming pool, a spa facility, a fitness club, a private dining room, a screening room, and even indoor golf.

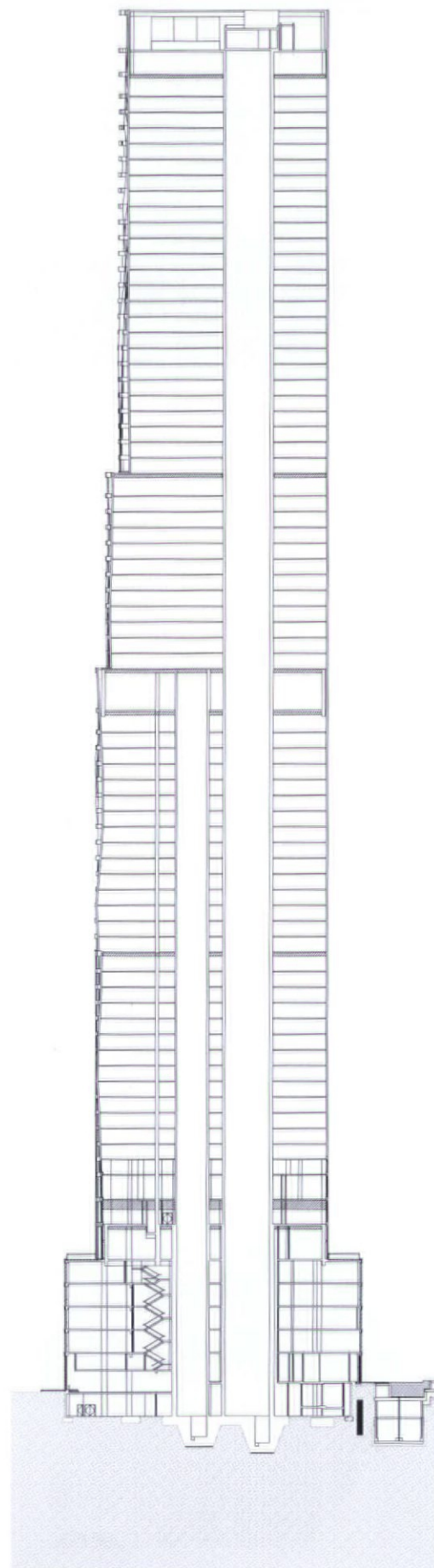
If you walk at a brisk pace – and we all do in this city – it takes no more than seven minutes and fifteen seconds to cover the distance that stretches from the residential tower's brick-clad lobby to the entrance of the New York Stock Exchange.

Sheathed in torqued panels of stainless steel, Gehry's first skyscraper is certainly the kind of icon that speaks to a clientele with a bullish sensibility. When the morning

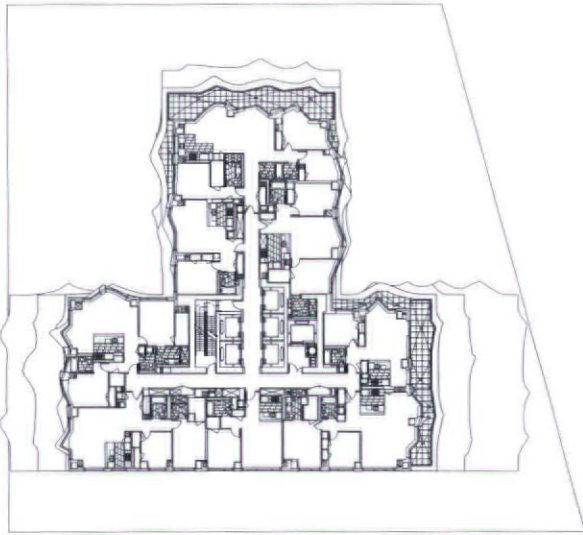
sun animates the tower's metal exterior – Gehry has compared its folds to the drapery of Bernini – it is surely a spectacular sight to behold, especially when it is viewed from Brooklyn.

But on those many overcast afternoons when New York's flat light drains the building of its sculptural magic, it reveals itself to be what it truly is: a very large developer tower with a dressed-up facade. Whether it augments or injures the New York skyline is a matter of opinion, although it's worth noting that the building's exaggerated height is only possible due to the purchased air rights of a neighbouring hospital.

The purpose of the exterior pleating, according to the architect, is to give the building some 200 unique apartment layouts, and to allow for projecting bay windows that enhance the tower's exceptional views. The apartments are indeed commodious – the Gehry office has even designed integral hardware —



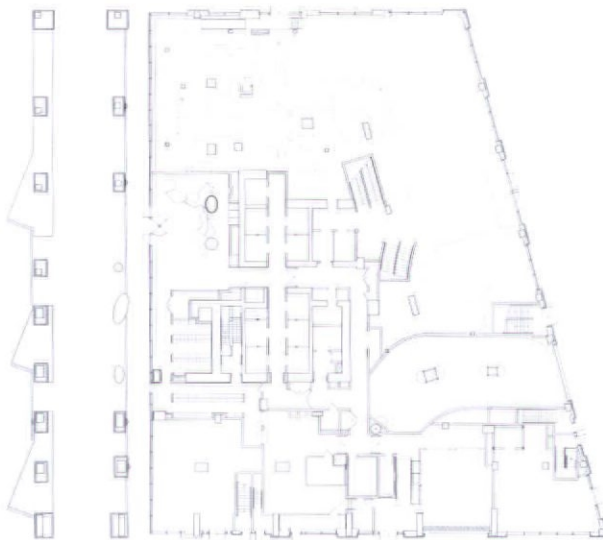
cross section



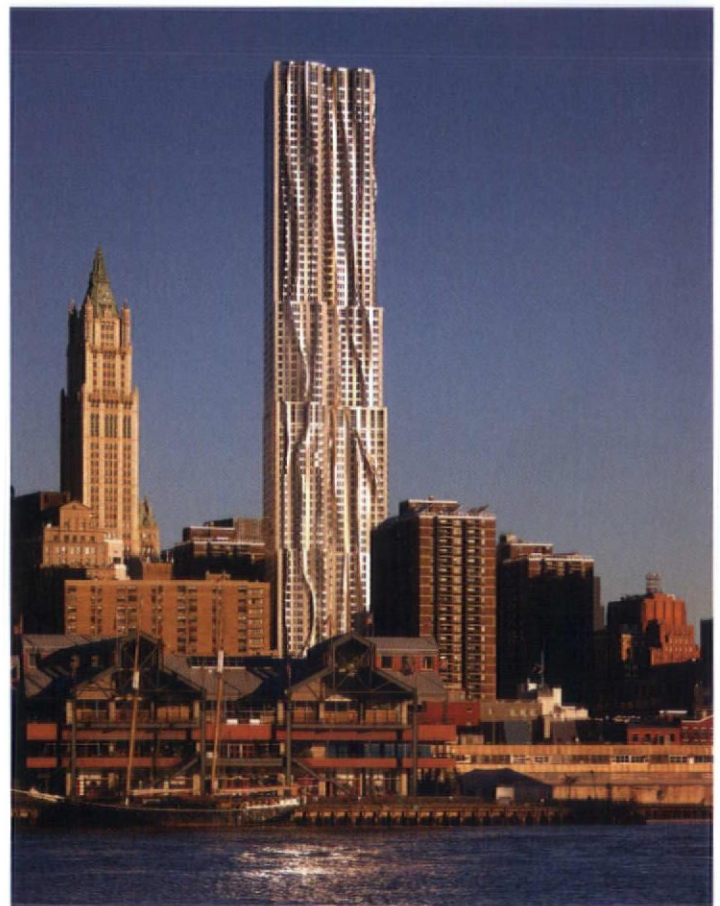
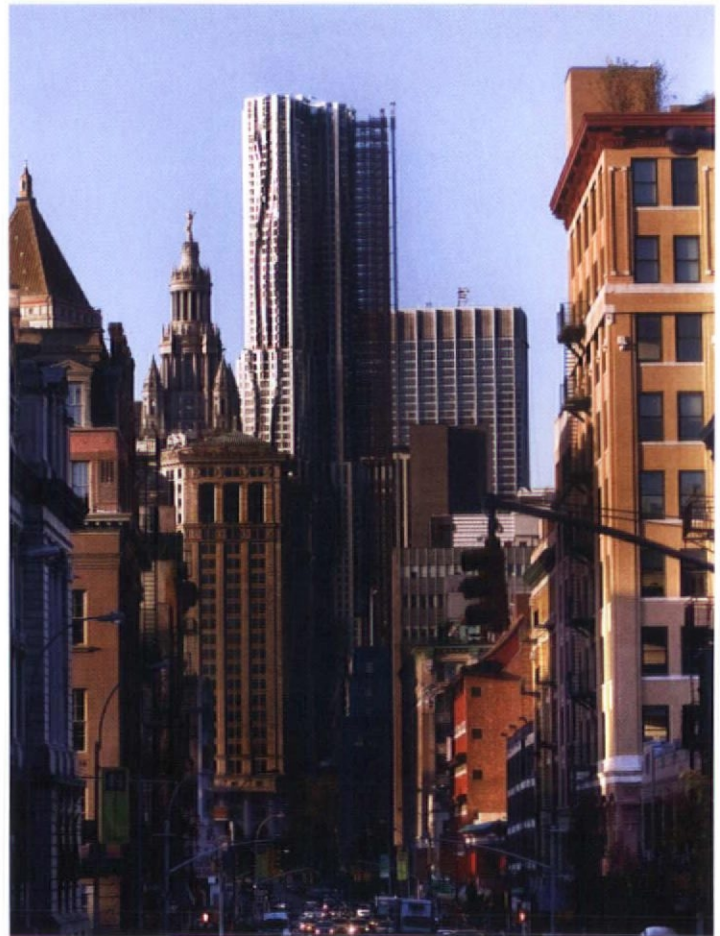
typical floor plan levels 51-75



typical floor plan levels 39-50



ground-floor plan



IT TAKES NO MORE THAN SEVEN MINUTES AND FIFTEEN SECONDS TO WALK FROM THE TOWER TO THE NEW YORK STOCK EXCHANGE


but the effect of the bays is mitigated somewhat by the fact that the orthogonal windows are inset and not flush with metal exterior panels, as was originally intended. Manufacturing so many panes of curved glass was apparently too expensive for Forest City Ratner. Indeed, a south-facing facade appears to have been 'value-engineered' out of its folds altogether – it is simply a flat plane – though Gehry has stated that this was actually intended to give the building a kind of visual variety.

That is accomplished, in any case, by the base of the building, a similarly unremarkable, five-storey orange-brick box from which the steel stalk of the tower grows. This is actually typical for Gehry, who is a more pragmatic architect than the public is often led to believe. Service areas of his buildings, as opposed to their more photogenic primary faces, are often simple and unadorned.

Here, an industrial-looking structure contains, in addition to the

lobby and amenity spaces of the residences, a public school with a separate entrance – a product of the political horse-trading that made the tower possible in the first place. The interior of the school is to be designed by another architectural firm, Swanke Hayden Connell.

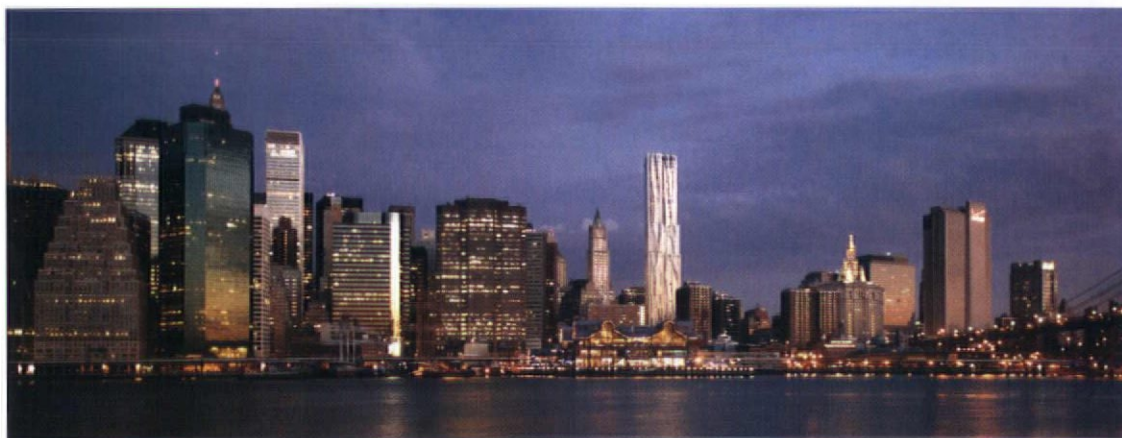
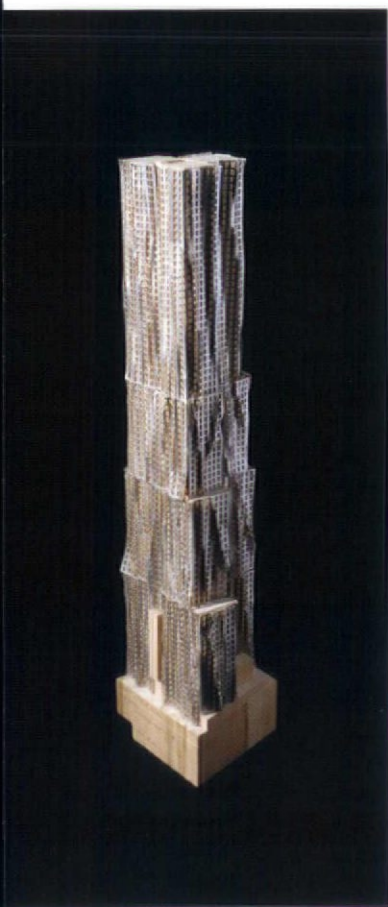
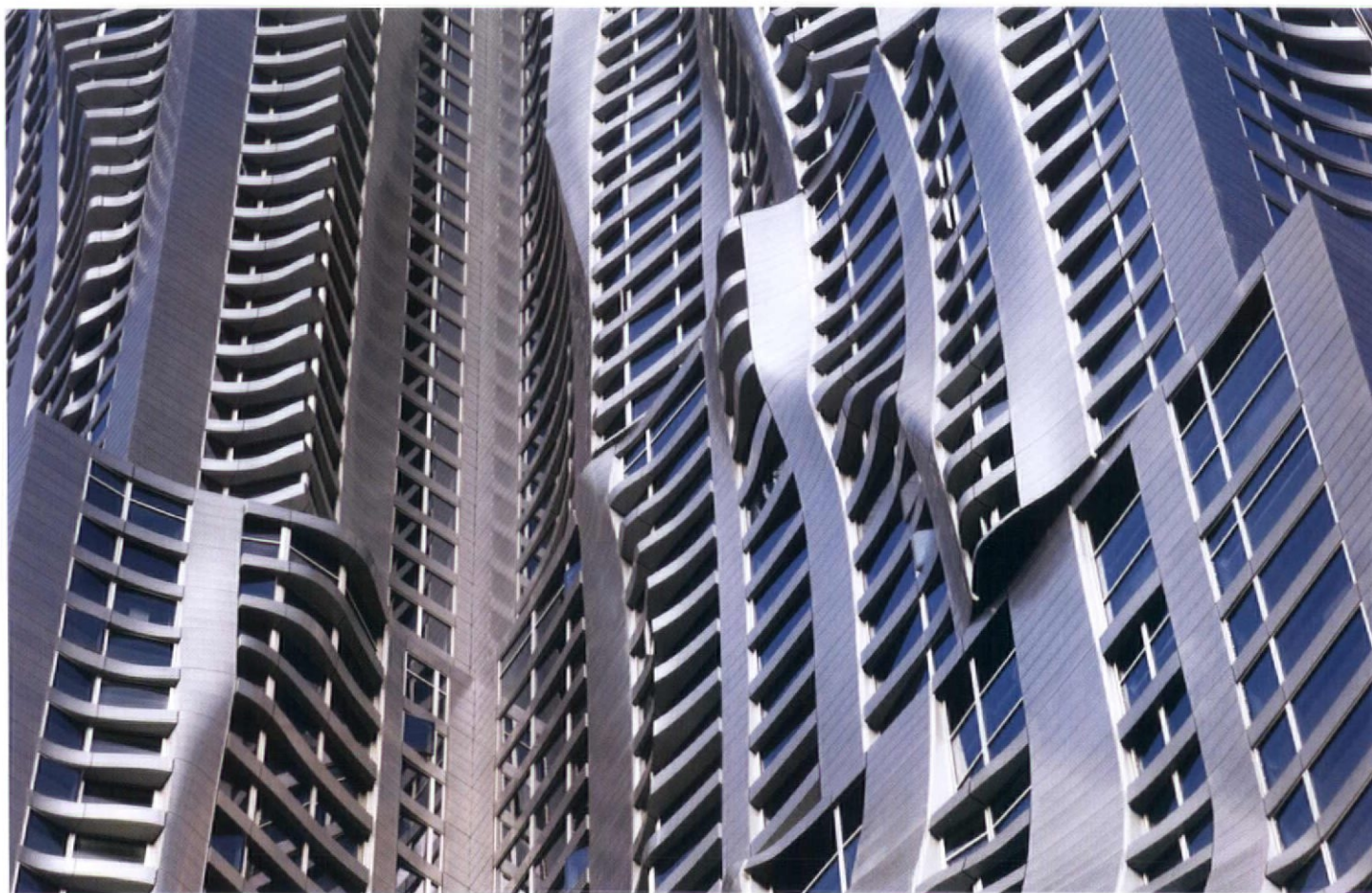
Gehry's previous collaboration with Forest City Ratner, on the controversial Atlantic Yards project in Brooklyn, led to widespread criticism that the architect was merely being used for his reputation by the developer to push through an over-scaled project. An open letter by the author Jonathan Lethem was particularly biting.

Is the architect once again being used as the lipstick on a developer's baboon, or has he this time leveraged his name to gift the city a shiny new landmark? This is a question that New Yorkers will argue about for years to come. In the meantime, from a distance, when the light is good, it's an awfully pretty primate. 



generative sketch





Far left_ Models were used to visualise the form of the facades
 Top_ The architect has likened the metal folds to the drapery of Bernini
 Above_ The tower shimmers against the New York skyline in the twilight hour
 Left_ The exterior pleating of the tower creates a range of apartment layouts



AS TATE BRITAIN'S JAMES STIRLING EXHIBITION OPENS, SELECTED CRITICS EVALUATE HIS LEGACY IN THIS SPECIAL TEN-PAGE FEATURE. WRITING FIRST, ROBERT MAXWELL INTERPRETS STIRLING AS THE MASTER OF MANNERISM

Did James Stirling have a theory of architecture? Not in the sense that Robert Venturi has a theory of architecture, a story that can be made into a book, setting up a reasoned framework others can use. If Stirling knew what to do, in any instance, he was following some sort of instinct – an inner voice. And yet there is a surprising consistency in his work.

I believe that the crucial influence on Stirling was that of his tutor, Colin Rowe. Rowe went on to gain an MA in History at the Warburg Institute, but first completed his Diploma in Architecture, so he was a trained architect, and he combined in his own judgment the appetite of an architect and the knowledge of a historian. He sent his students to the library to crib ideas for their designs. Under Rowe's influence, Stirling developed eclectic tastes, and was able to admire many periods of architecture, particularly the early years of the 19th century, when inherited forms began to be subject to pressure from technology, and Neo-classicism was evolving into Romanticism. Schinkel was particularly enjoyed.

In his speech 'Architectural Aims and Influences', his response to the award of the RIBA Royal Gold Medal in 1980, Stirling acknowledged his interest while still a student in the

'just arrived' Modern movement, the foreign version as taught by Colin Rowe. Rowe encouraged his students to cultivate visual acumen, endlessly looking at buildings. With Rowe, Stirling learned how to look.

Rowe taught the history of architecture, not as an academic discipline, but because certain architects had made architecture enjoyable. He enjoyed Palladio, and also Serlio, Scamozzi, Giulio Romano, Hawksmoor, Ledoux, Cockerell and Lutyens, all architects with an enlarged self-consciousness about their art. Self-consciousness does not exactly kill spontaneity, but it creates a doubt, and the necessity to overcome doubt by a sort of considered impulse.

The common factor in all these preferences was the tendency towards Mannerist doubt, and my theory about Stirling's theory is that some principle of contradiction that he absorbed from Rowe joined up with his own origins as a Glaswegian Scot who enjoyed teasing the English, and gave him a *modus vivendi* for his entire career.

If this is true, we ought to be able to trace in Stirling's work a tendency to order linked to a tendency to break the rules, a simultaneous enjoyment of contradictory aspects. The idea of balancing opposing tendencies

suggests something like a game. It appears that Stirling has taken to heart certain effects in Mannerist architecture, where rules are followed in one part only to be broken in another. In his essay 'Ronchamp: Le Corbusier's Chapel and the Crisis of Rationalism' (AR March 1956), he writes: 'The desire to deride the schematic basis of Modern architecture and the ability to turn a design upside down and make it architecture are symptomatic of a state where the vocabulary is not being extended, and a parallel can be drawn with the Mannerist period of the Renaissance. Certainly, the forms which have developed from the rationale and the initial ideology of the Modern movement are being mannerised and changed into a conscious imperfectionism. For Stirling then, Mannerism was a *conscious imperfectionism*. It also seems to imply 'turning a design upside down'.

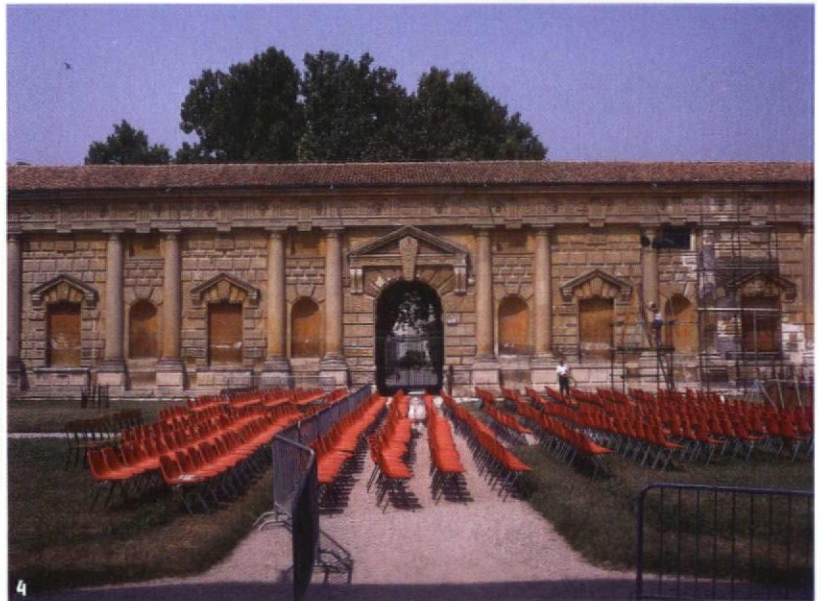
In his seminal essay entitled 'Mannerism and Modern Architecture' (AR May 1950), Rowe argues that architecture has at least twice become a theatre for the expression of conflict: once in the Seicento, when Michelangelo showed the way into a post-Renaissance condition of anxiety, and again in the early 20th century. The main characteristic of Mannerist art was to express the conflict between the current system and the promptings of disbelief and scepticism. The art conforms to the prevailing system yet at the same time subverts it. At the Palazzo Tè the *voussoirs* are correct, but appear to be slipping out. The emotion conveyed is one of discomfort, in which the beauty of the ideal is asserted and questioned.

Rowe makes a good case for finding analogous qualities in the architecture of the 1920s, when there was a conflict between the abstract system of Cubist composition, where the personal vision of the artist is privileged, and the inherited, somewhat classical canon of composition still evident in works —

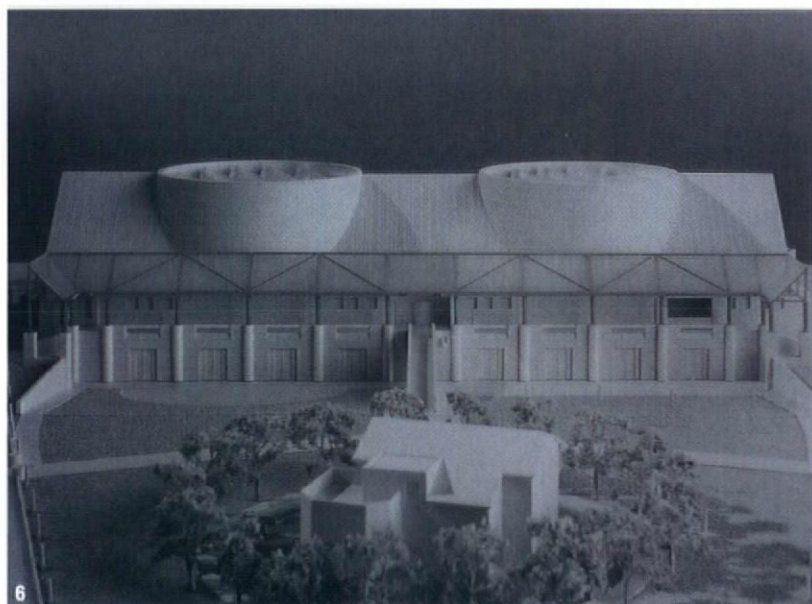


1_ The collision between the cave and the drum at Neue Staatesgalerie in Stuttgart displays the opposing qualities that characterised the Mannerist style of James Stirling
2_ The entrance from the street to the Clore Gallery at Tate Britain in London, the first major commission awarded to Stirling after a period of material problems at the University of Cambridge

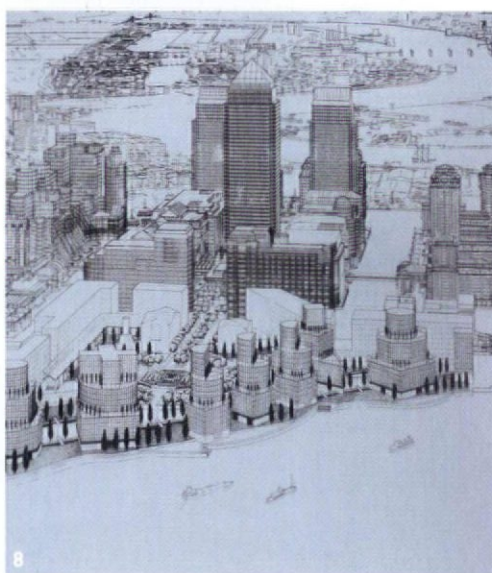
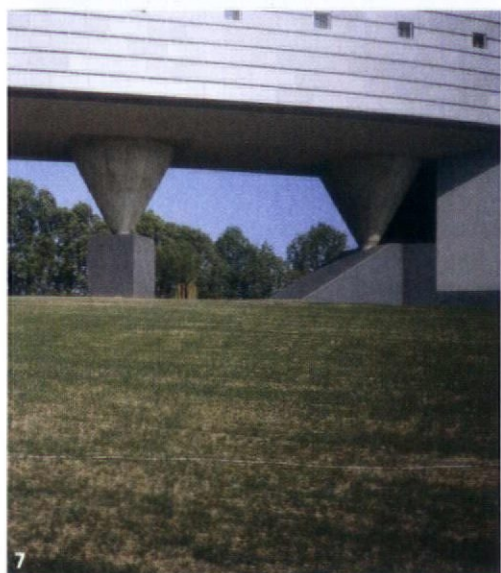
3_ The University of Leicester Engineering Building is built in red brick, in a bold move away from the prevailing white walls of the International style
4_ The voissors of Giulio Romano's Palazzo Te in Mantua break away from the Classical Order
5_ The entrance to the Clore Gallery, Tate, London, is marked by a large pedimental opening reminiscent of a classical temple



JAMES STIRLING TOOK SOMETHING FROM ROWE, AN ATTITUDE THAT PROVIDED HIM WITH A MEANS OF RISING ABOVE FUNCTION



6_ The Library at Latina designed by James Stirling and Michael Wilford shows the refined sense of Mannerism with which the pair forged their name
7_ The imposing conical caps of the Braun Factory, situated at Melsungen
8_ The Thames-side project for Canary Wharf, London proved to be a landmark scheme in James Stirling's illustrious career



of Behrens, early Gropius, Adolf Loos and later in Art Deco cinemas. Where he had to search very carefully to find a source of contradiction between Modernism as technicity and Modernism as Cubist fragmentation, for us in the post 9/11 world, with global warming no longer in doubt, after Darwin has shown the true age of the universe, after cosmologists have had to invent new concepts like dark energy and dark matter to explain what they cannot observe, the conditions in which we live supply all too readily the ontological grounds for doubt. Mannerism, instead of being confined to a system for the periodisation of art history, now becomes a condition in the production of art. We have finally reached what WH Auden called 'the age of anxiety'.

Rowe became visible with his articles for the AR: 'The Mathematics of the Ideal Villa' (AR March 1947) and 'Mannerism and Modern Architecture' (AR May 1950). Stirling became visible worldwide after the construction, with James Gowan, of the University of Leicester Engineering Building. One of the first things about Big Jim was his tendency to be cheeky, which, when he came to build on the hallowed turf of ancient universities was expressed initially by the use of red brick, as found in the Victoria Building, the nucleus of the University of Liverpool. It was partly at least a case of the 'lucky Jim' syndrome of Kingsley Amis: the redbrick style was offered in place of Portland stone. Stirling and Gowan were two northerners bringing forthrightness to architecture.

The enjoyment of breaking the rules is evident in the Engineering Building. Leicester shocked because it was far from being the orthodox style of its time. It already had historicist overtones. It referred to Russian Constructivism, as opposed to Le Corbusier; it was in red brick, as opposed to the white walls of the International Style; and it had improvised greenhouse glazing, as opposed to 'high design'.

Peter Eisenman makes a case for interpreting the building, not as an example of straight engineering design, but as an elaborate formal game of simultaneously affirming and denying the traditional associations of structure and materials. Without abandoning modernity, it extends the meaning of Modern architecture far beyond the literal reading of material forms. Eisenman's analysis establishes Stirling's interest in Mannerism, although Eisenman does not use that word.

The Clore Gallery at Tate was the first major commission awarded to Stirling after a period when the material problems of the History Faculty at the University of Cambridge and social problems with his housing at Runcorn were evidently held against him. Its entrance looks back at the Tate portico and is lined with stone, and in addition is marked by a large pedimental opening ('as if a classical temple had been removed,' said Summerson), with a half round opening above that reminds us of Dance or Ledoux. So we now have more evident historical references, expressed as a combination of the playful and the scholarly.

Inside, beyond the reception desk, the staircase rises in a straight flight, pointing 'away' from the galleries, and the visitor has to pause at the top, reorient, and pass in the opposite direction along the subsidiary side space in order to enter the sequence of top-lit galleries on axis. There *is* something perverse about this.

However, Summerson was unexpectedly appreciative of Stirling's experiment. Reviewing it in the AR, he approved the result as producing 'the kind of strange space that Soane would have enjoyed', and he capped his article with the title 'Vitruvius Ludens' (AR March 1983), the architect at play. The idea of treating architecture as a game, with rules, was after all close to his own interpretation of the *Classical Language of Architecture*. Summerson returned to this theme in

a later article 'Vitruvius Ridens or Laughter at the Clore' (AR June 1987), where he comments about a lack of support to a panel above the corner window: a device 'leaving the brick panel in an apparent state of imminent collapse. One thinks of Giulio Romano's slipping *voussoirs* at Mantua.' The risky game that Stirling plays is clearly Mannerism, although Summerson, like Eisenman, does not use the word. The only critic, to my knowledge, who does use the M-word is William JR Curtis.


Similar Mannerist qualities can be identified in much of Stirling's work, particularly in the Neue Staatsgalerie in Stuttgart, in the Braun factory at Melsungen, the Wissenschaftszentrum Berlin, the Cornell University Center for the Performing Arts and the Lowry at Salford. They can also be seen in unbuilt designs for the Bibliothèque de France at Paris, Compton Verney in Warwickshire, the Library at Latina, the Thames-side project for Canary Wharf, and many others.

The desire to make fun of routine Modernism comes back, as we have seen, to Stirling's advent in London as a Northerner. But if he felt able to make fun of routine Modernism, it was not just a matter of architectural allegiance; it was also because of his sense of humour, which meant no claim to certainty should be taken too seriously. His temperament produced a bias that predisposed him to a criticism of Modernism, making him a Postmodern as well as a Modern, making him above all a Mannerist: indeed, a master of Mannerism.

Two aspects of postmodernity, then, were evident in Stirling: mannerist doubt, and the sense of continuity. The sense of continuity is the same, within architecture, as the sense of the city. So we have two things working in him: doubt and the city. He said: 'I am interested in exploring the combination of function and economy with new strategic permutations of the monumental and the informal, as part of a broader and more profound search for a robust modern architecture which

contributes to the evolution of the city and contemporary culture.'

My conclusion is that Stirling is not to be judged by the relatively superficial aspects of an adopted style. It is true that one can differentiate between an earlier and a later manner that may be termed by architects Modern and Postmodern. But there is a wider view of modernity, a view that holds good in all the other arts. In the literature of the 1920s, we find that James Joyce's *Ulysses* and TS Eliot's *The Waste Land* are full of references and historical allusions; in Picasso, we have *Les Femmes d'Alger* at one moment and neo-classical fat ladies in the next; Eric Satie's music can be abstract and arcane, or become popular tunes like *Gymnopédie* or *Gnossiennes*. It is only in architecture that functionalism provided a straitjacket that limited the scope of its ideas. In discussing the Sackler Gallery at the Fogg Art Museum with Michael Dennis, Stirling stated: 'Nowadays one can draw equally, without guilt, from the abstract style of modern design and the multiple layers of historical precedent.'

Stirling took from Rowe an attitude that provided him with a means of entering architecture into a level where it could contribute to the life of the mind. Both the architect Stirling and the painter Francis Bacon share an attitude towards their art, in which the rule of mimesis, in Bacon, and functionality, in Stirling, are made subject to a higher necessity: that of creating an ontological doubt. They propose an authenticity that derives not from science or the world of facts, but from an inner vision. No one questions Picasso's authenticity, and no one denies Picasso's importance to art. In the same way, we may recognise an authenticity, in both Bacon and Stirling, which goes far beyond the question of style. 

Robert Maxwell studied at Liverpool University, where he met James Stirling and Colin Rowe. Maxwell is Emeritus Professor of Architecture at Princeton and was formerly its Dean

BRIAN HATTON DELVES INTO STIRLING'S PHOTO ARCHIVE, DISCOVERING HOW YOUTHFUL OBSERVATIONS OF LIVERPOOL WERE A RICH SOURCE OF MATERIAL FOR HIS PRACTICE

Although some among them rise without trace, many writers, artists and composers commonly recall into their work unforgotten traits and allusions from their childhood and regional origins. Think of James Joyce, Dylan Thomas, WH Auden; or Joan Miró and Marc Chagall; or the folksongs which Gustav Mahler wove into his symphonies. Moreover, Modernist techniques such as Cubism and Surrealism invited visitations from association, memory or the unconscious by their openness to metaphor and metonymy.

Architects, however, have rarely drawn from such sources; their métier being formal and impersonal to a greater degree than art or even music, they have tended to adopt the terms – classical or modern – generic to international practice. There have been a few exceptions: Le Corbusier, of course, and Aldo Rossi, but among architects whose projects evidence a personality formed from what was not only a childhood setting but a distinctly local urban and cultural character, the most outstanding case is James Stirling.

Stirling's Liverpool origins have often been noted. Mark Girouard's biography gave pages to the city where, son of a ship's engineer, James played among the marine

clutter of Jesse Hartley's Albert Dock, whose warehouses he adapted for the Tate Gallery. The Liverpool buildings and other projects referred to here are richly illustrated in 'Shifted Tideways: Liverpool's Changing Fortunes' (AR January 2008). Stirling's 'Black Notebook' records his interest in Liverpool pioneers of iron frame building, such as Peter Ellis' Oriel Chambers, as do his photographs of the city.

Now held in the Canadian Centre for Architecture, the records span from the 1940s to those taken on a seven-year pass issued to Stirling by the Dock Board on 9 June 1961. Several writers on Stirling have mentioned his local sources; but the most comprehensive encomium of Liverpool's role in Stirling's larger formation has been that of Colin Rowe's essay 'James Stirling: A Highly Personal And Very Disjointed Memoir' in the 1984 monograph edited by Peter Arnell and Ted Bickford.

Rowe's memoir raises Stirling's Liverpool to an elevated plane. After remarking on the 'Piranesian' docks, it extols on the ambitions of Liverpool's culture which had 'typically indulged itself in fantasies which were likely to involve an unmistakably local (and Enlightenment) combination of elegance, information and megalomania.'

The local culture in which Rowe situates Stirling was not the port's industrial vernacular, but the artistic continuity of The Liverpool School, which he traces from Foster, Cockerell and Elmes' Neoclassicism to the American Beaux-Arts style of Reilly and the Pier Head office blocks, and on, through the Modernist formalism of the Liverpool Polish School, to Rowe's own students, whom Stirling (one of them) termed 'Liverpool Palladians', and whose work Reyner Banham dubbed 'Maniera Liverpooliana'.

Since Rowe's other student, Peter Eisenman, had submitted a design for the Catholic cathedral, Eisenman too, had he won the job, would have come to it not only as a reciprocation of Atlantic sympathies long expressed in Liverpool (notably after the publication of Hitchcock and Johnson's *The International Style* in 1932), but also as a late exponent of Liverpool 'Maniera'.

The city of Liverpool, then, displayed two traits: academic-formal and functional-vernacular. Both were illustrated in *Seaport*, Quentin Hughes' 1964 architectural history. Among its plates, one summarised Liverpool's dual face: a terrace on Canning Place, showing a tough warehouse positioned next to elegant Corinthian pilasters.

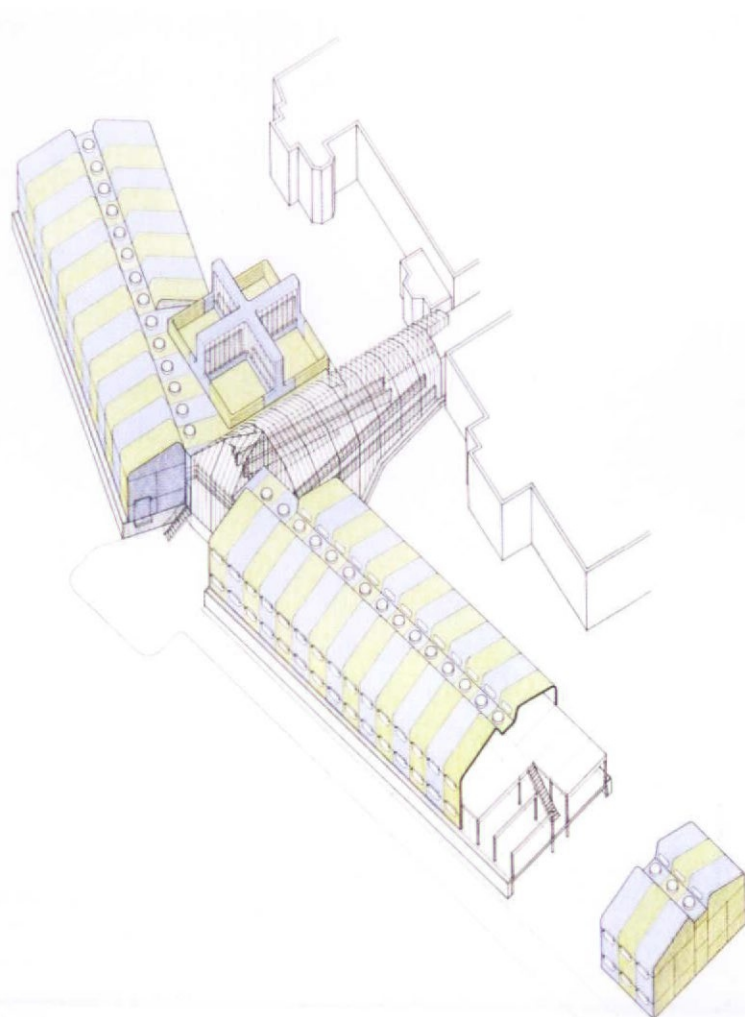
Stirling, too, conjoined both local traits in his work. Some commentaries divided these into earlier functionalist and later postmodern phases; but his photographs support critics such as Robert Maxwell (see pages 72–75), who have argued that both were always present. This is evident in his shots of baroque ruins, Soane walls, oasthouses and Martello towers. Likewise, his Liverpool images include, as well as dock subjects, selective views of the city's substantial neoclassical edifices.

Indeed, the photographs often frame a motif that combines functional metal or glass with a Neoclassical fragment in stone. One such is of two warehouses, which foregrounds a stone corner on —

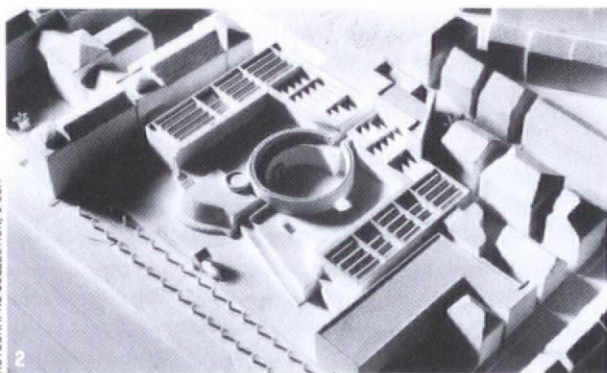
1 & 2 Liverpool's Custom House with the roof blown off is very similar to Stirling's Neue Staatsgalerie
 3 & 4 Ships in Liverpool docks. Stirling surely recalls seeing ships dry docked in his design for the Florey Building
 5 & 6 Stirling's 1969 axonometric of the Olivetti Training School resembles landing stages, as featured on the Meccano magazine cover, February 1937



1



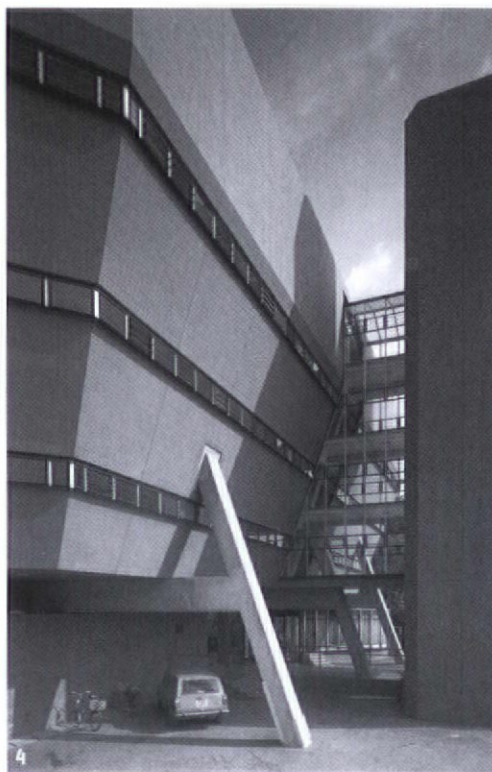
5



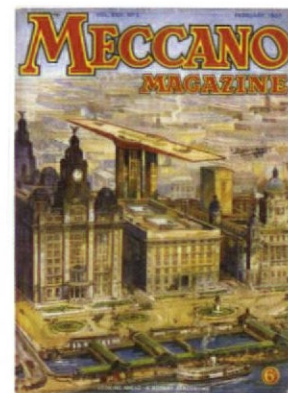
2



3

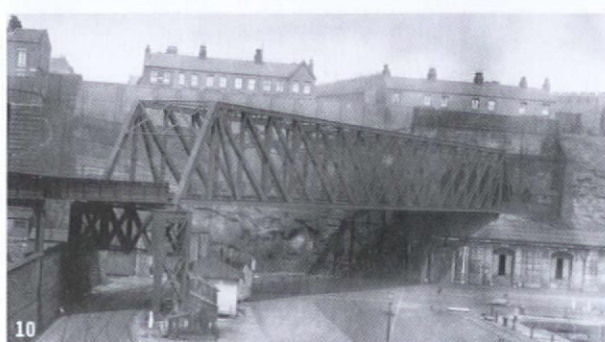
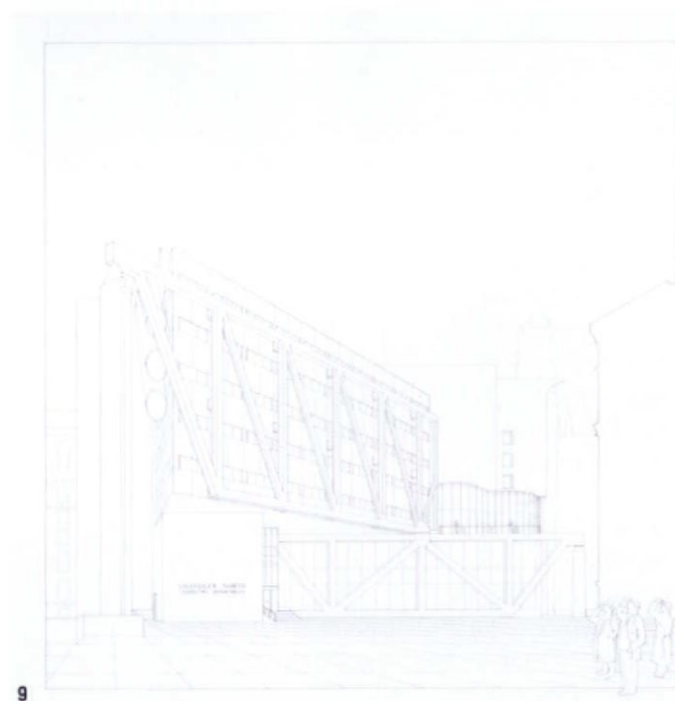
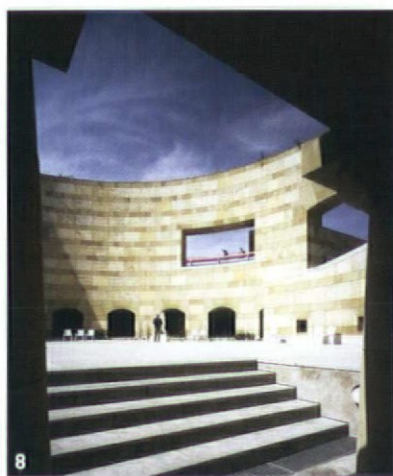
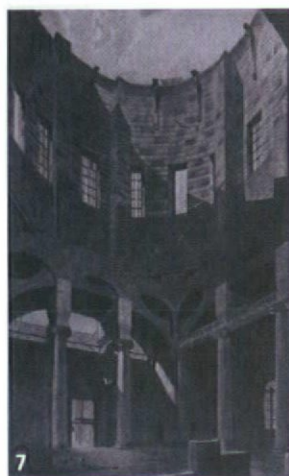


4



6

THE LOCAL CULTURE IN WHICH COLIN ROWE SITUATES STIRLING WAS THE ARTISTIC CONTINUITY OF THE LIVERPOOL SCHOOL



8 ALASTAIR HUNTER / RIBA LIBRARY PHOTOGRAPHS COLLECTION; 9 CCA; 14 JOHN DONAT / RIBA LIBRARY PHOTOGRAPHS COLLECTION



7 & 8 This 1940s drawing of Custom House, Liverpool, by John Foster 1828, shows its ruined state with cupola burned off and rotunda exposed to the sky; a form echoed in the Staatsgalerie

9 & 10 Columbia University chemistry department extension 1980, by James Stirling and Michael Wilford with its steel truss, recalls a truss at Herculeum Dock, carrying the railway into Dingle Tunnel

11 & 12 Liverpool's St James' Cemetery near Gambier Terrace features great ramps, which perhaps inspired Stirling at the Staatsgalerie

13 & 14 The faceted skin of the spiral stair in the courtyard of No. 16 Cook Street has similarities to the stair at Stirling's University of Leicester Engineering Building

Eberle Street against iron gutters and cantilevered windows of lofts opposite on the corner of Tempest Hey, so as to appear as if the stone quoins, squinch and cornice conjoin metal panels into one tectonic compound. Moreover, as the windows lead up to a pointed arch, the photograph combines neoclassical, Gothic and functional forms in an ensemble of diagonals and rotation typical of Stirling's compositions. To see this, however, one must be alert to shifts of location and scale.

Thus, for Columbia University, Stirling drew a new chemistry wing as a steel truss slamming into the stone wall of an older block, astonishingly similarly to the way in which a truss bridge of the old Liverpool Overhead Railway swerves to slam into a cliff at Dingle Tunnel. When, titanic in every sense, this project foundered, Stirling redrew it as a vast ruin, gazed on by figures like those seen in wartime photographs looking at collapsed trusses of the bombed Overhead, a railway universally missed in Liverpool after its needless demolition in 1957.

Metal and masonry feature in Stirling's photographs of steel warehouse supports thickened round their base with masonry, which look to be sources of compound columns at the Wissenschaftszentrum Berlin. Another photograph of a dockers' loo shows a monopitch shed on attenuated columns that are refined in the monopitch loggia of the Cornell University Center for the Performing Arts and of the Library at Latina.

Stirling rarely photographed objects in full, but usually framed loose mechanical items against sheer masses of masonry. In a 1961 dock view, a motorbike-sidecar is parked on a granite quay by a warehouse, from behind which emerges the derricks, bridge and funnel of a freighter, with the sandstone Anglican Cathedral rising over sheds beyond. In his thesis elevation drawings, Stirling adapted such glimpses of ships' upperworks looming over walls, with masts counterplayed against masses.

Those were fairly direct lifts; but in his later projects, he would displace and invert source elements to complex ends. St Andrews University residences, for instance, appear in a photomontage like grain silos on finger-docks; but their main corridor looks in an axo drawing like the deck of a liner. Evidently, what fascinated Stirling in the docks was not the metal mechanics of ships alone, but their engagement with the stone stereotomies of wharves and basins.


The compound of ship and dock is best seen in the exposed hulls of ships in the stepped walls of graving docks, of which Liverpool had many, several built by Hartley. At Oxford's Florey Building, Stirling realised a ship/dock hybrid, with battered courtyard walls recalling a graving dock, while the diagonally propped outer wall resemble a ship's hull, even to its gangway-like stairs.

Likewise, this form appears in the warehouse/barge of what he called, in a cartoon of it steaming at sea, his Venice 'boatshop bookshop'. 'Afloat on land' also describes the Olivetti Training Centre in an axo, where it looks as if it were a floating landing-stage like that for ferries at Liverpool Pier Head, which Stirling photographed in 1961. It is drawn in green, as the landing-stage was and appeared on a 1937 cover of *Meccano* magazine. Made in Liverpool, this construction toy and its magazine would have been familiar to Stirling.

However, it was in the Neue Staatsgalerie in Stuttgart that Stirling's *both-and* associations amounted to a museum of Liverpool traces. They may have begun with Württemberg stone – like Liverpool's, a pink sandstone – which he even used in grey Berlin. Behind the gallery, metal air intakes are shaped like ship's ventilators, while the stale air outlet is a Piranesian joke of sandstones blown out from the front wall, leaving a hole like that which Stirling photographed in a wall of the Albert Dock in 1961. In a nearby basin he also photographed a slip ramp like those he would use in many projects,

and which at Stuttgart guide a promenade over terraces across the building. Yet Stuttgart's ramps evoke a larger Liverpool model, one unforgettable to any Liverpool architectural student; namely the ramps cut by John Foster into the walls of an old sandstone quarry to conduct mourners down to St. James' graveyard, now beside the Anglican cathedral. They zig-zag like those leading up to Great Public Terraces in Colin Rowe's *Collage City* (1978), and Stirling and Rowe would surely have recalled them at Stuttgart.

Yet the central event in the Neue Staatsgalerie promenade – the circular courtyard – may descend from another Piranesian Liverpool site, though one lost long ago. Stirling favoured circular interiors, but while the circular libraries that he proposed for Latina may have descended from the two circular reading rooms (one above the other) in Liverpool's Picton Library, his Stuttgart courtyard is not quite comparable to the central rotunda of Schinkel's Altes Museum, because it was intended to allow continuous public passage across the site. Such a condition was offered by John Foster's Liverpool Custom House from 1827 to 1948, when, as Rowe lamented, it was 'senselessly and expensively demolished'.

This huge building had allowed walkers day and night to cross Canning Place through its domed central rotunda. Bombed in 1941, and drawn soon after as a ruin open to sky and seagulls, the rotunda became an open circular courtyard, and the subject of a campaign to save it during Stirling's years at Liverpool University. Some critics have read in Stuttgart's circular void a sign of a *lost centre*. Perhaps. But if so, the loss was Liverpool's and Stirling's, because, if any architect's work may be said to correspond to what Kenneth Frampton has meant by 'critical regionalism', it was James Stirling's. The irony is that UK regional impoverishment led to its being realised elsewhere than its first place of inspiration. 

THE AR ASKED FIVE OF ITS ESTEEMED CONTRIBUTORS TO REFLECT ON THE LEGACY OF JAMES STIRLING FOR ARCHITECTURAL HISTORIANS AND PRACTITIONERS TODAY

SAM JACOB

Legacy is a difficult thing. The complex contemporary internecine interests, ideologies and positions make the archives of the recent past fractious sites of conflict. We should bear this in mind as James Stirling's legacy begins to resurface in architectural culture.

Stirling certainly provides productive ground for this kind of conflict. Pivotal in so many ways – both in his own development from Modernist to Postmodernist and as the single figure who joins up so much of post war British architectural culture: from New Towns, the Independent Group, Brutalism, Postmodernism and – through association – High Tech.

But Stirling's own work resists easy categorisation. In the Derby Civic Centre proposal for example, we see that hoary English issue of heritage handled with an edge so sharp that ensures everyone – Modernist and conservative – would be offended. By retaining a historic facade, yet laying it at an impossible angle, Stirling reconfigures context. Closer to Gordon Matta Clarke's architectural interventions, the existing becomes the site of operation to reveal both the subtexts of culture and the potential of its transformation through a surreal gesture.

As No 1 Poultry bursts into view like a peachy rainbow as you drive up Cornhill, we see Stirling's fully-ripe combination of the same historico-cultural condition. It's still a strange thing to look at, almost ridiculous in its colour and verging on cartoon in its formalism, the building's apparent dumbness bristles with interlocking denseness and determined engagement with its urban context. Its combination of stupidity and obviousness with intelligence and spatial complexity makes the architecture that surrounds it – both context and contemporaneous – seem dumber, meaner and duller.

It's Stirling's leaps across categories that make his work still resonant. But more than this, his complex architectural position is demonstrably acted out through architecture itself. This remains Stirling's powerful legacy – a reminder that the substance of building itself can transcend the interests that attempt to contain and define it. **Sam Jacob is a founding director of the London-based practice FAT.**

PETER DAVEY

In the early 1960s, architectural students were ravished by images of the University of Leicester Engineering Building, then gradually being completed. Stirling's and James

Gowan's first major project was as exciting as Louis Kahn's Richards Medical Research Laboratories at the University of Pennsylvania. Both used brick in an almost Brutalist way, but in both, severe and massive masonry forms were offset by passages of glazing and transparency. Here, at last, were ways out of flimsy post-war architecture. Paradoxically, by glancing back to the severe forms of nineteenth-century industrial buildings, their towers suggested languages in which rich and diverse cities could be constructed.

Stirling was one of the first to add to the language of Modernism by obviously quoting from history, yet his appropriations were rarely, if ever, simple Postmodern copies of old motifs. They were acquisitions – stealings in T.S. Eliot's terms – but always seen through a Modernist filter. Much was investigated in the years following Leicester: themes such as the glazed arcade, the central drum, the winding path, the giant cornice and many other compositional elements were explored in unbuilt projects.

In the end, many of the motifs were incorporated in real buildings where they did not always work, for instance in the overscaled No 1 Poultry in the City of London, one of Big Jim's posthumous buildings. But the Neue Staatsgalerie in Stuttgart involved them all, and more, in triumphant congregation. The museum is welcoming yet monumental, interlocking with the existing city, while being part of the landscape: it contains both a series of galleries in classical enfilade and a cascade of ramps and terraces. If some of Stirling's work is tough, brutal even, the Staatsgalerie is one of the most complex, gentle and humanly rewarding buildings of the twentieth century. Even had he built nothing else, Stuttgart would have guaranteed Stirling a place in the architectural pantheon.

Peter Davey was the Editor of The Architectural Review from 1982 to 2005

MARK SWENARTON

James Stirling was the pre-eminent architectural form maker of the second half of the twentieth century. While his career comprised, as he recognised, a series of stylistic phases, the common theme was his interest in, and mastery of, the sculptural and plastic possibilities of architectural form. This was the thread connecting the 'industrial' phase of the 'red buildings' with James Gowan, the 'Neoclassical' phase of the Neue Staatsgalerie in Stuttgart and the final synthetic phase of the Braun AG Headquarters at Melsungen.

In historical terms, Stirling stood in that British lineage of plastic imagination and invention that began with Robert Smythson in the 16th century and extended through Nicholas Hawksmoor, John Vanbrugh, John Soane and Philip Webb to Edwin Lutyens in the 20th century. None of these architects played by the prevailing 'rules', be they of classical, Gothic or Modern. All were interested in the drama of three-dimensional form rather than the two-dimensional abstractions of plan or elevation. Whereas we might say that the social conception of architecture, stemming from John Ruskin and the Arts and Crafts Movement, is Britain's main contribution to the theory of architecture, this plastic, even Mannerist, tradition is surely its main contribution to its form.

That Stirling was the outstanding form maker of his era is not to say, of course, that every design of his was a great design or even a success. This level of inventiveness carries its own risks, formal as much as technical, and these were not always avoided. Nor was Stirling an architect for all occasions. 'Background architecture' was definitely not his forte, but cities also need background buildings and the monumentality of his work could be out of place.

For all this, Stirling remains an inspiration to anyone who believes in architecture's creative potential. As we approach the 20th anniversary of

his untimely death, it is right that we celebrate him as the greatest British architect since Lutyens and the greatest architect of his day.

Mark Swenarton is James Stirling Professor of Architecture at Liverpool University and was formerly editor/co-founder of Architecture Today

CHRISTOPH GRAFE

Almost twenty years after his untimely death James Stirling's work has become a historic legacy and material for architectural historians. The recent renewed attention to the projects from the architect's early collaboration with James Gowan – the red brick buildings in Leicester, Cambridge and Oxford – is informed by the desire to recuperate Stirling for the history of post-war Modern architecture. By contrast, Stirling's work of the 1970s and 80s – the exercises in pink and baby-blue rendering, his deployment of classical cornices or rustica, the fragments of Schinkel, Ledoux or Hawksmoor (and, at the same time, Le Corbusier) – cannot easily be appropriated as revisions of Modern architecture and its larger ideological projects or projections.

However, the use of historic references, which irritated critics defending the legacy of the Modern movement in the 1980s, has largely lost its explosive character as 'Postmodernism' itself has become a faint memory or, depending on one's point of view, an aberration. The rhetorically charged borrowings from the pre-war avant-garde and international post-war Modernism, as proposed by OMA, or variations on the theme of a 'new simplicity' in the Swiss manner – and the more recent merger of both approaches in work of Herzog and de Meuron – have eclipsed the preoccupation of architects of Stirling's generation with European urban forms.

Many of the 'urban renewal' operations in London and other British cities, meanwhile, are marked by the reappearance of a-contextual planning of the crudest sort dressed

in variations of hi-tech or, worse, reflect the effect of unprecedented overdevelopment. The cramped open spaces in projects such as St Giles in the West End, the wind-swept piazzas formed by the buildings of the GLA or the non-descript squares surrounding the new buildings of Spitalfield's Market, demonstrate a notable absence of ideas of how buildings might relate to their surroundings in other ways than merely occupying their sites. It is against this background that the exercises in urban form in the work of James Stirling acquire new significance as at times highly ideosyncratic or overdetermined, yet often extremely precise and inventive urban compositions. The treatment of figures and ground, and of memorable images and objects, in the Stuttgart Neue Staatsgalerie or the Berlin Wissenschaftszentrum constitute a poignant, and physically present critique of contemporary urban development. This, beyond the historiographic re-assessment of Postmodernism and Stirling's role in it, represents the most important legacy of Stirling's approach to cities and buildings for current practice.

Christoph Grafe is Director of the Flemish Architecture Institute in Antwerp and Associate Professor of Architectural Design / Interior at TU Delft, The Netherlands. He co-edited the 2009 OASE special issue on Stirling

[Christoph Grafe has co-organised the conference 'Re-thinking James Stirling', which will take place at Tate Britain on Saturday 11 June. Author Owen Hatherley will be speaking at the event, and his AR contribution can be found with this article online at \[architectural-review.com\]\(#\)](#)

[James Stirling: Notes from the Archive is at Tate Britain, London, from 5 April to 21 August. The exhibition has been co-created with the Canadian Center for Architecture in Montreal, and the Yale Center for British Art, New Haven. For full visitor information, please visit \[tate.org\]\(#\)](#)



SKILL

**ATHLETES VILLAGE
BLOCK N15**

LOCATION

STRATFORD, LONDON

ARCHITECT

**NIAL MCLAUGHLIN
ARCHITECTS**

WRITER

ROB GREGORY

KEY WORDS

**ELGIN MARBLES,
PRECAST CONCRETE,
DIGITAL IMAGE
SAMPLING**



Facadism. Skinning up. Call it what you will. There has been much debate about the processes involved in the design and construction of the London 2012 Athletes Village. While the Olympic Delivery Authority and Lend Lease's intention was legitimate in their ambition to involve practices with varying levels of experience, the notion of pairing up established and up-and-coming practices, banded as either small, medium or large firms, to work on the design of single buildings put some architects off.

Beyond the prestige of working on the Olympic site, what fulfilment could there be in designing the skin for an otherwise anonymous residential block by someone else? And how would an architect with any design ambition generate meaning from being asked to work in this way? Some architects, however, did accept the challenge and are soon to see the fruits of their collaborations. Niall McLaughlin, for instance, through constraints imposed on him while working as a sub-consultant to Glenn Howells, saw the opportunity to do something unlike anything his practice had done before.

Howells, a contemporary of McLaughlin's, with a much larger practice, was given responsibility for two plots that comprised 498 residential units. He invited Niall McLaughlin Architects and Piercy Conner Architects to work with him on the facades and at their first design team meeting gave them the simplest of briefs. As McLaughlin recalls, Howells stated that neither team should dare to produce a syncopated facade, effectively vetoing the sort of slippery-slidy window layouts that have become the ubiquitous answer to cladding nondescript commercial and residential interiors.

Although tongue-in-cheek, this instruction encapsulated concerns held by many critics that the whole process could see the village becoming little more than a parade of over-stylised, thinly veiled attempts

to dress up, disguise or ameliorate these buildings' potentially monotonous frames, or chassis. Built to strict functional briefs for both the athletes and their future mixed-tenure residents, the design of the residential chassis across the site has a degree of consistency that some designers would inevitably want to break down through expressions of their own creativity. McLaughlin, however, did the opposite, using what he refers to as the abstract and normative characteristics of both the design and procurement processes, and the resulting structure of the building as the starting point for the generation of his facade in an approach that if anything exaggerates and plays on abstraction and repetition.

For him, this project was a rare opportunity to focus on the themes of architectural representation and decoration, which he relished, having spent time researching the history and significance of the screen in architecture through the writings of Gottfried Semper and Karl Bötticher.

Recalling Semper's assertion that the origins of monumental architecture lay in the bedecking of the festival scaffold with emblems of the festival tradition, the challenge for McLaughlin was how to provide a facade that not only expressed the structuring of the building and its interior spaces, but that would also perform a representative function for a wider public.

'We had the image of Sol LeWitt's *122 Variations of Incomplete Open Cubes* in our minds from the beginning,' he says. 'With its endless variations, set within a grid, every single one of them is different, and you feel as though it is trying to communicate something to you.'

In describing the trance-like state that this image induced, McLaughlin sought to replicate this sense in a facade that would appear to be communicating order. In reality, however, as with Sol LeWitt's piece, when you try to seek out where the order lies, all you find is more

variation, and the oscillation between order and variation becomes part of the building's communicative function. But what mode of decoration would he take? Having eliminated the idea of working with artists on a series of specifically commissioned pieces, why did he eventually decide to sample the Elgin Marbles?

'Well,' he says, in anticipation of what will no doubt become the most obvious reading of the building, 'the last thing I want is for people to think it is to do with representing the origins of the Olympics. At one stage, I thought we might go and look at Olympia, but I didn't like that idea, because there is too simple an equivalence between the origins of the Olympics and this site.

For me, it is all about the origins of architectural representation and my own fascination with these particular stones and their deracinated state.'

Tracing the Parthenon sculptures' eventful history over two millennia, he goes on: 'There is a sense to me of the Elgin Marbles being fragmented and lost. They were made under the eaves of a particular building at a particular time by particular people, with a particular set of meanings at that time,' he says. Yet as history tells us, that was just the start and through their eventful life, they have come to mean so much more today.

'Damaged by volcanic ash, burnt in a fire, defaced by Christians, robbed of their metal by Turks, blown up by Venetians in a bombardment, the Marbles were taken down by Lord Elgin, sunk in the ship on the way back to England, recovered by sponge divers, brought back to one of the most polluted cities ever on earth and covered in sulphur dioxide,' muses McLaughlin.

He was fascinated by the way in which the marbles have constantly changed state and have constantly been re-idealised, right up until Lord Duveen's attempt in the 1930s to make them white again (when of course they were never white in the first place) in some sort of

THIS PROJECT WAS A RARE OPPORTUNITY TO FOCUS ON THE THEMES OF ARCHITECTURAL REPRESENTATION AND DECORATION



Previous page, main picture_ Under construction, the precast concrete relief panels sit amid columns and beams of the principal long facades

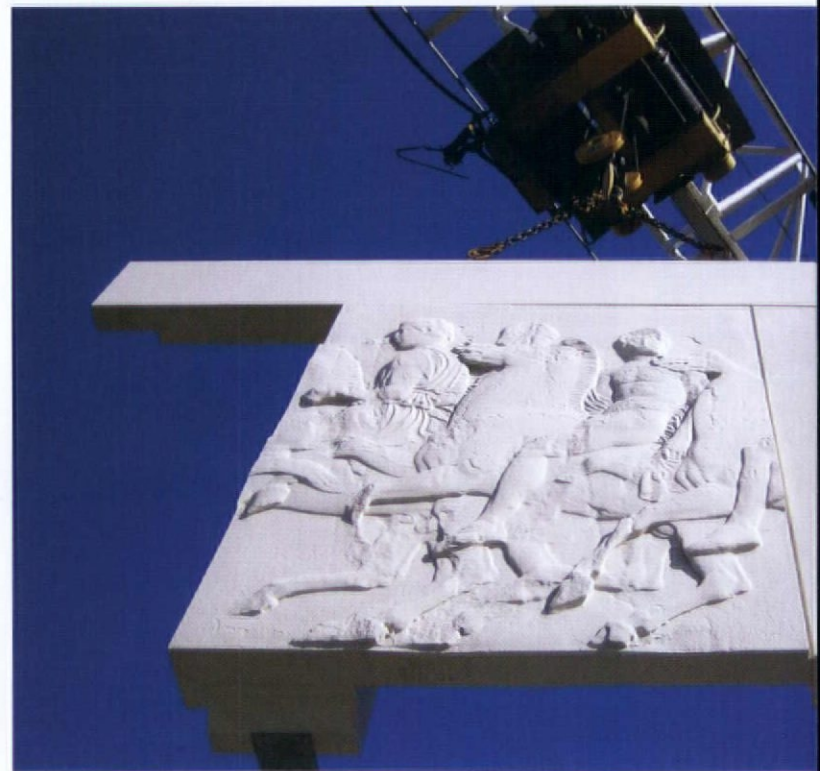
Top right_ The north elevation shows the random disposition of variant panels

Above right_ McLaughlin and his team were given one night to capture the digital information in the British Museum

Centre right_ Metropolitan Works created the medium density fibreboard reproduction using a 5 axis router

Bottom right_ A latex mould was made for each of five subject stones, from which five variant panels were produced by masking the mould into 950mm, 1200mm, 1650mm, 1800mm and 2200mm widths

Middle_ Final insulated cast panels and beams are craned into place
Far right_ As a result of the re-sampling, some panels create irregular exposed edges that cast delightful shadows






ideological drive that in fact damaged them further in the process.

Beyond their physical meaning, the subject matter of the stones held significance for McLaughlin, which led him to choose five carvings that were more theoretically related to the notion of representation, including the presentation of the sacred peplos to the goddess Athena. In the end, however, it was a clandestine conversation with senior curator Ian Jenkins late one night in the British Museum that finally helped him to decide.

While McLaughlin's colleagues Chris Cornish of Inition and Tom Lomax of University College London were busy capturing the vital digital imaging data on the other side of the room, Jenkins turned to McLaughlin and said, 'I know you have all these theoretical ideas which are very interesting, but really it's all about the horses. The people of London will love the horses, look at their rhythm, look at the repetition.'

With that the decision was made. McLaughlin redirected his colleagues to five different stones that would be the basis for the 25 variant panels required to clad the building. From the digital files, the next stage was to produce the 2200 x 2200mm medium density fibreboard reproductions, using Metropolitan Works' 5 axis router, which in turn were used to make the latex moulds from which Techrete would cast the final panels.

With five different-sized panels cast from each mould, in 950mm, 1200mm, 1650mm, 1800mm and 2200mm widths, the panels were backed with rigid insulation before being craned onto Howell's chassis. Once installed, the delightful effect of light falling across the panels was revealed as the relief cast its shadow on the flat concrete frame. The image was timeless, but strangely familiar. Yet re-sampled, unordered and placed at random, using an algorithm based on the velocity of particles entering the atmosphere, there is much more to McLaughlin's Marbles than meets the eye. 



THE LATEST LAUNCHES AND NEW PRODUCT DEVELOPMENT FROM THE ISH BATHROOM FAIR IN FRANKFURT

EDITED BY
CATHERINE SLESSOR

- 1_ Mixer and taps
by Antonio Citterio
for Axor Hansgrohe
- 2_ Ellipso oval
basin in lava
black matt finish
from Kaldewei
- 3_ Antonio Citterio's
elegant new three
pronged shut-off
valve for Axor
Hansgrohe
- 4_ Sensuous curved
basin from the Il
Bagno Alessi One
range by Laufen
- 5_ Light and minimal
bathroom by Grohe
- 6_ New lavatory
designed by Philippe
Starck for Duravit
- 7_ Decorated
basin from the
Onovo range by
Villeroy & Boch
- 8_ Ronan and
Erwan Bouroullec's
new range for Axor
Hansgrohe
allows users to
create their own
personal wash basin
- 9_ Basin from the
Freedom collection
by Ross Lovegrove
for Vitra



4



1

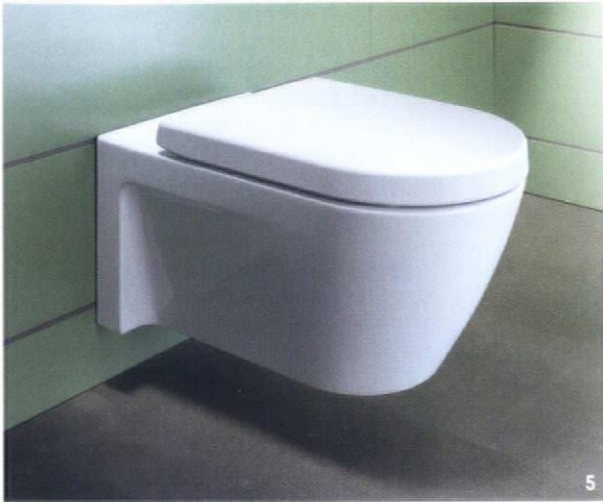


3



2

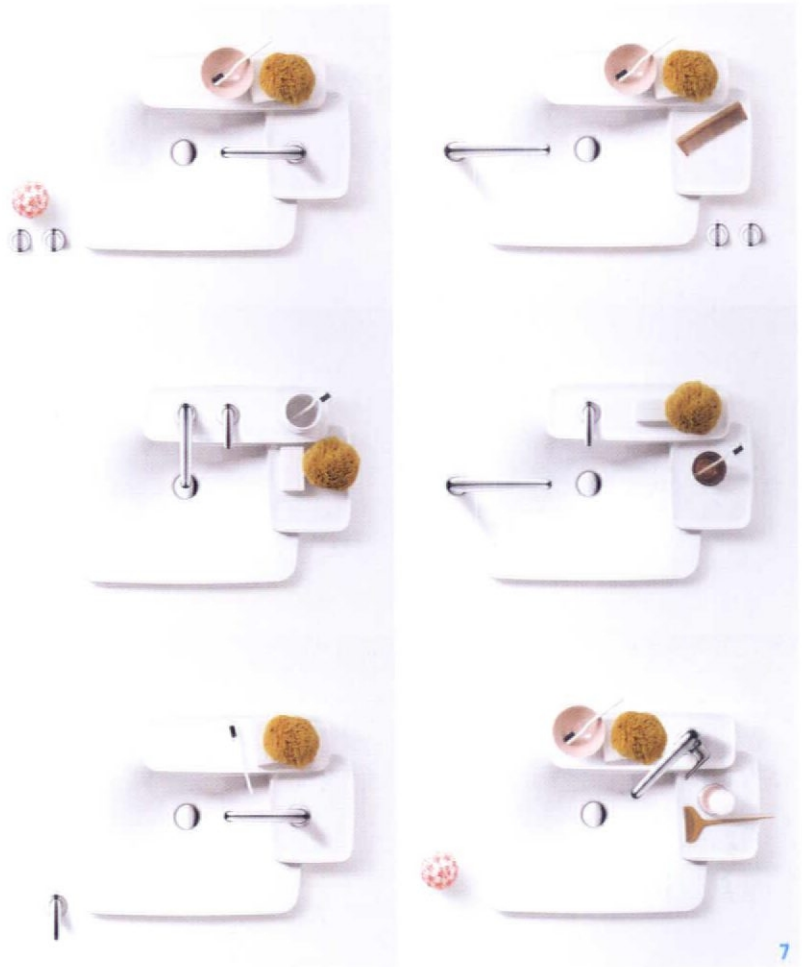




5



6



7



8



9

GRAND

You leave the show irked by the many fine sculptors who have been excluded

EXHIBITION /
Modern British
Sculpture
 Until 7 April,
 Royal Academy of Arts,
www.royalacademy.org.uk

A century ago the academy was the enemy of artists and architects, a conservative bastion against change and renewal. Once again the academy has become the enemy, or at least its theory-inflected modes of thinking, more concerned with spinning verbiage around an artwork than with the artefact itself. Such thinking has spread beyond the academy to infect also criticism and curatorship. An example of what results is, aptly enough, on show at the exhibition *Modern British Sculpture*, curated by Penelope Curtis and Keith Wilson at the Royal Academy of Arts.

Given the subject, this should have been a dazzling exhibition. While Henry Moore dominated the mid-20th century as prolific producer of plaza plop to prestigious buildings around the world, British sculpture saw a huge flowering of diverse talent in the last decades of the century that drew international admiration. A few of the many sculptors excluded from this exhibition are Richard Deacon, Andy Goldsworthy, Ian Hamilton Finlay, Anish Kapoor, David Nash, Rachel Whiteread and Richard Wilson, and then the Chapman Brothers and other YBAs. With so much to have chosen from,

you leave the show irked by the many fine sculptors who have been excluded and also by the often poor selection of works from those included. Most annoying of all, though, is that this poor selection is to provoke fatuous 'confrontation' and 'conversations'.

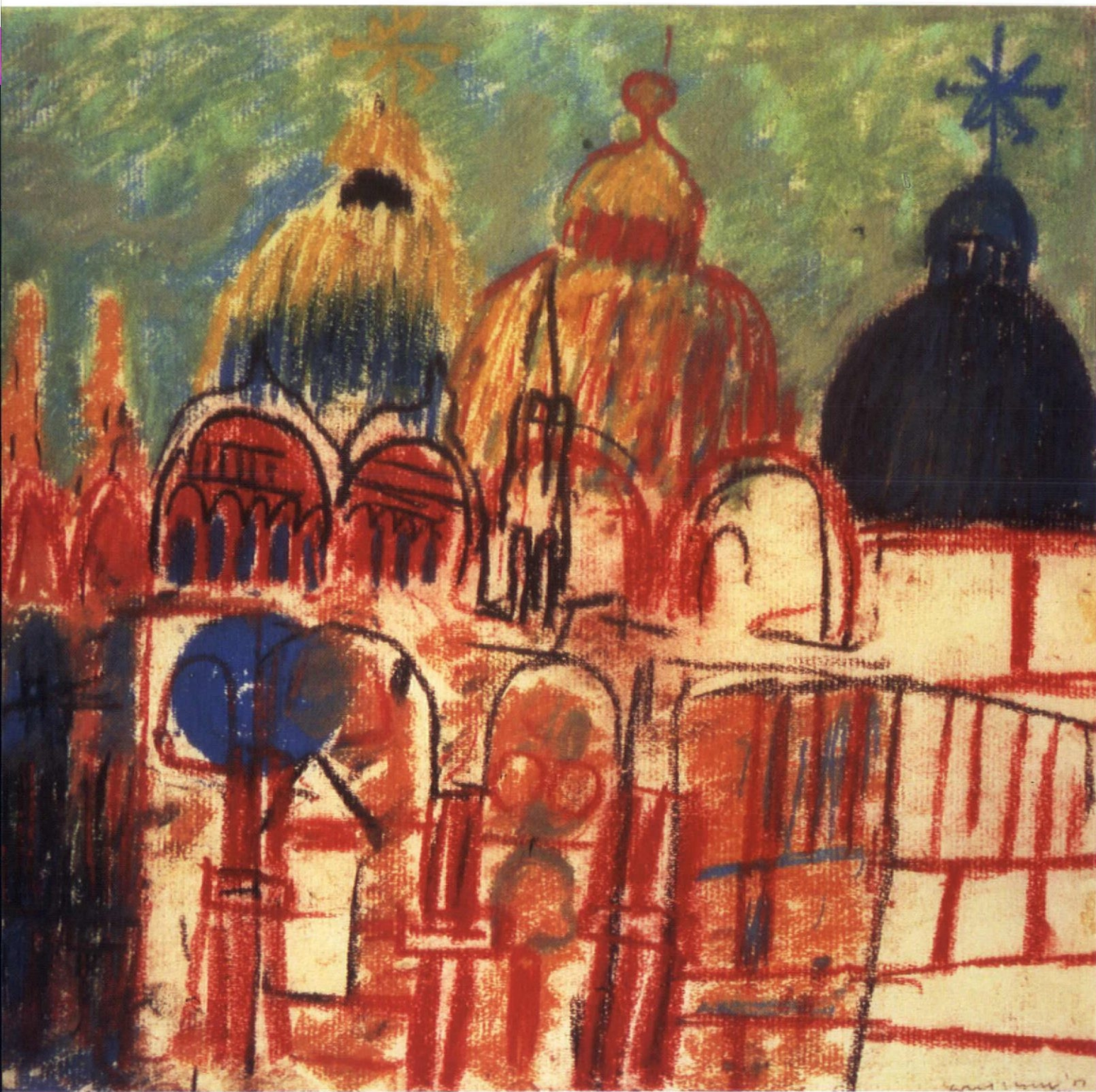
Even before entering the RA, the portents are troubling. In the courtyard is a meticulous reconstruction of the Merz Barn in the Lake District, in which Kurt Schwitters made his late *Merzbau*. But the artwork itself is in Newcastle, you cannot enter the shed and, besides, what relevance does Schwitters hold for *Modern British Sculpture*?

The first room confirms the problematic nature of the exhibition. A caption announces 'that each gallery features pieces that focus attention on a specific problem, aspiration or confrontation (taking) us through a series of sculptural conversations'. (Uh-oh.) The room is dedicated to 'Monumentalising Life and Death', which is fair enough, given that much sculpture is commemorative, and the sub-theme of abstraction and figuration makes sense. The latter is represented by photographs of Jacob Epstein's plaster carvings (1906-08) for the BMA building in the Strand.

Abstract sculpture, and its affinities with architecture, is represented by a mock-up of Edwin Lutyens' Cenotaph for Whitehall (1919-20). This is spectacularly misjudged: the

Sketch of St Mark's Cathedral in Venice by Louis Kahn, from a fascinating recent exhibition at the Italian Cultural Institute in Los Angeles focusing on his encounters with La Serenissima. Travel sketches were juxtaposed with his designs for the Palazzo dei Congressi, commissioned in 1968 but destined to remain unbuilt. Executed in soft-toned pastels the sketches are tiny and beautiful works of art in their own right





COLLECTION OF SUE ANN KAHN

Attempts to be clever have resulted in the opposite and a theoretical agenda swamps aesthetic engagement

Below left_ Anthony Caro, *Early One Morning*, 1962 Below right_ Phillip King, *Genghis Khan*, 1963



Cenotaph is a small structure that holds its own in the vast elongated space of Whitehall; the mock-up appears huge when cramped with the RA's central octagon. Moreover, anyone with visual acuity would sense that something is seriously wrong with the mock-up, and any architect should see what it is. The sides lack entasis, without which the structure loses its poise. Along with the cramped proximity of the viewer, this exaggerates the presence of the moulding at the top of the plinth, further robbing the piece of poise and unity.

The next room is the highlight of the show. Entitled 'Theft by Finding', it shows ancient works from the British Museum once studied by and influential on various modern sculptors. Among the best is a commandingly still Egyptian baboon (c.1350BC), the sinuously sensual *Sanchi Torso* from India (c.900AD), the poignant portrait of Gudea,

King of Lagash, Mesopotamia (c.2130) and some Assyrian reliefs. The modern sculptures simply can't compete with the ancient works, although Eric Gill's *Headdress* (1928) is beautifully sexy. The sculptor has cleverly made a virtue of the constraint of carving an elongated rectangular block.

From now on, although there are some fine pieces, it is more or less downhill all the way. The following room shows Jacob Epstein's mighty *Adam* (1938-39) and Henry Moore's dinky *Snake* (1924), as well as a replica of the hessian-covered bench at Anthony Caro's Whitechapel show of 1963 (Why?). Next is a room of four disparate sculptures that the caption reveals to be works by former Presidents of the RA (is that the best you could come up with?). Alfred Gilbert's *Jubilee Memorial to Queen Victoria* (1887) is splendid if over the top: the seated queen impresses by looking as unimpressed as

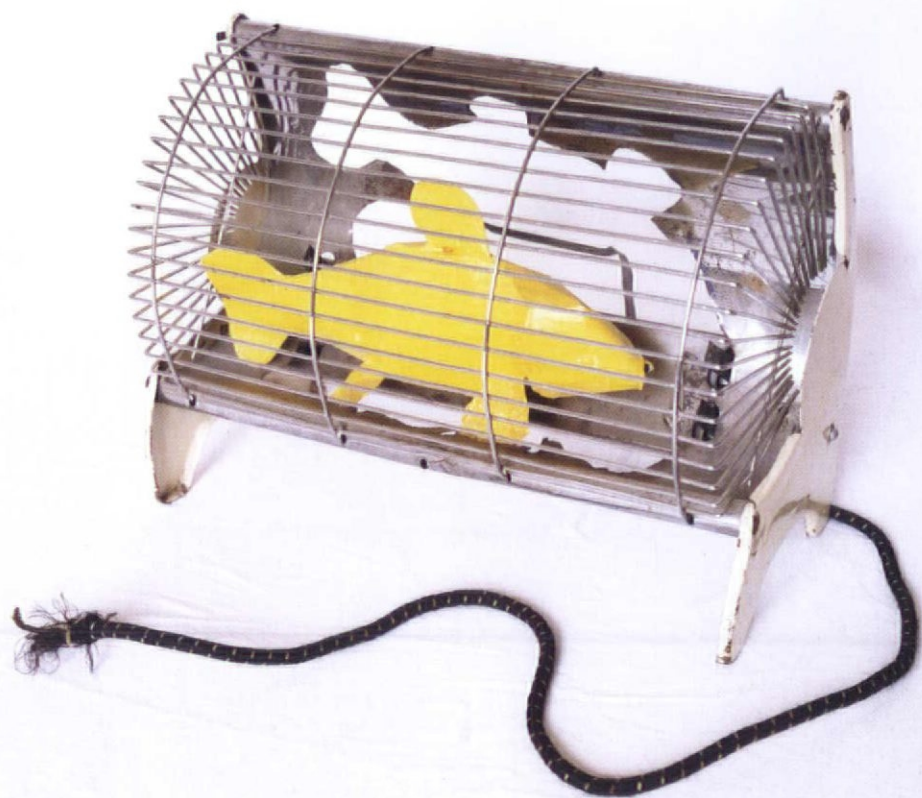


befits an empress who has seen it all. Frederic Leighton's *Athlete Struggling with a Python* (1877) could be argued to be modern in that Mussolini (but also Hitler) would probably have liked the sculpture. Charles Wheeler's *Adam* (1934-35) stands in a preposterous pose and Philip King's *Genghis Khan* (1963) appears to be included merely because of its name.

A room then shows ceramics and sculptures together simply on the basis they were often shown together. Shown also are

old Chinese ceramics, but not the Japanese that were equally influential. There are small pieces by Naum Gabo, Barbara Hepworth and Ben Nicholson, while the next room confronts Henry Moore's *Reclining Figure* (1951) with Hepworth's *Single Form (Memorial)* (1961-62). This is no contest: the Moore is a mix of curvilinear fluidity and angular disjunction, of ease and effort; and there is a rich interplay of forms, regardless of the viewing point, together forming a narrative of sorts that engages

Below_ Bill Woodrow, *Electric Fire with Yellow Fish*, 1981



and elicits empathy. Against this the overrated Hepworth is merely somewhat elegant.

Another whole room is filled by Victor Pasmore and Richard Hamilton's *An Exhibit* (1957), with floating rectangular Perspex planes distributed at more or less equal density, so there are no moments of greater or lesser intensity. With so much excluded, why was this included? The next room is given over to Anthony Caro's still fresh, plinth-less, zinging red *Early One Morning* (1962); but this merits the space dedicated to it.

From now on all the pieces are plinth-less and the display very erratic in terms of who has

been selected and the particular works that represent them. Richard Long's *Chalk Line* (1984), for instance, lacks in drama compared to similar works in elongated, angular dark stone. The fabric work *Line 3'68* (1967) by Barry Flanagan is most easily understood if seen as part of a series, introducing you to a way of looking. In this same big room are photo works with varyingly convincing claims to be sculpture. Included here is Carl Andre's *Equivalent VIII* (1966) that, like the Jeff Koons that follows, doesn't deserve to be displacing excluded British works.

Jeff Koons' *One Ball* (1985) shares the next room with the

inevitable Damien Hirst vitrine, here *Let's Eat Outdoors Today* (1990–91), which, with its rotting food and swarms of dead and dying flies, still disgusts many. The penultimate room is called 'In Search of the Ordinary', (wouldn't banal have been a better word?). While there is a Bill Woodrow, *Electric Fire with Yellow Fish* (1981) from his best period, it is otherwise filled with truly dismal works, many of them utterly meaningless without the necessary verbiage.

But even in the catalogue this is often missing. Although it is easy to invent a narrative, it would be welcome to know what the artist or curators think, say,

Lucia Nogueira's *Untitled* (1989) is about and why it is worthy of inclusion. Off this room is a small one displaying a Len Lye film (how is this sculpture?) and a slide-and-tape sequence by Richard Wentworth, in which the sculptor's eye discovers all sorts of inadvertently created works.

The last room contains a Sarah Lucas assemblage *Portable Smoking Area* (1996) that, unlike her best work, requires you to read the caption before you 'get' it. There are also works by Gustav Metzger and John Latham, included for the supposed influence of the artists on those who followed and clearly not for any quality in the actual works.

Despite its moments, this is a shamefully bad exhibition in which misguided attempts to be clever have resulted in the opposite, and where a theoretical agenda has swamped aesthetic engagement. Yet a too common defence against deserved critical onslaught is self-congratulation at the controversy provoked, the supposedly intended 'conversations' referred to in the first room. This won't wash. To provoke genuine controversy and conversation requires a smidgen of intelligence and insight. This show is just stupid. Worse, it does a great disservice to Modern British Sculpture.

PETER BUCHANAN

Sadly, the show makes Gordon Matta-Clark's career appear even briefer than it actually was

Below_ Trisha Brown, *Planes*, 1968



EXHIBITION / Laurie Anderson, Trisha Brown, Gordon Matta-Clark: Pioneers of the Downtown Scene, New York 1970s
Until 22 May, Barbican Centre, London
www.barbican.org.uk

The fame of American artist Gordon Matta-Clark, who died in 1978 when only in his mid-thirties, comes not from his handling of a paintbrush or a chisel but a chainsaw. In the last

years of his life, his increasingly baroque cuts through the walls and floors of buildings in Europe and the United States brought him plenty of attention, but nowhere near as much as he has attracted since then.

In books on Matta-Clark, there are references to choreographer Trisha Brown and sometimes to musician Laurie Anderson, but this is the first show to treat them as a trio. The pretext is that they were all protagonists in the resurrection of what was then called the South Houston Industrial Area and would soon

become SoHo. This was the early 1970s when New York was in turmoil, with crime figures soaring, the South Bronx in flames and garbage piled high in the streets.

Matta-Clark studied for a degree in architecture at Cornell University, when Colin Rowe was on the staff, but said: 'I don't think most practitioners are solving anything except how to make a living.'

He lamented 'the abuse of Bauhaus and early Purist ideals' but also the eagerness of many architects to embrace

redevelopment, 'which sweeps away what little there is of an American past.' He hardly endeared himself to the profession when he was invited to exhibit at New York's Institute for Architecture and Urban Studies and blew out all the windows with a shotgun.

Like Matta-Clark, Brown made existing architecture a site for performance, as her dancers walked, harnessed down the side of buildings, or colonised SoHo's rooftops. There seems more point to her inclusion in the exhibition than

Below left_ Trisha Brown, *Floor of the Forest*, 1970; Below right_ Gordon Matta-Clark, *Open House*, 1972–85 (remade 2011)



the presence of Anderson, whose projects included sleeping in public places in New York to see whether different sites would influence her dreams. Anderson makes the 'psychogeographers' of today appear profound.

Along with Matta-Clark, Anderson was part of a loose artists' collective called 'Anarchitecture' that supposedly focused on 'gaps and leftover spaces', although Anderson recalls that 'we talked about the structure of sheep herding, about stars aligning'. I guess you had to be there. Certainly the uncaptioned grey photographs from the group's one exhibition (1974) confirm the verdict of another member, artist Richard Nonas, who said 'the promise of Anarchitecture never happened'.

Given his major works were displayed in derelict buildings,

Matta-Clark was well aware that gallery shows would be a problem. This exhibition collects what relics it can: marker-pen drawings, photographs and 'garbage bricks' – blocks of melted bottle glass that look Pompeian and minimalist. There are bits of flooring from the Bronx, upended as 'sculptures', and the four corners that Matta-Clark cut from the New Jersey house he bisected for *Splitting* – his most well-known but not his most interesting work. An over-enlarged 8mm film of Matta-Clark in action plays faintly on the wall nearby.

Sadly, the show makes Matta-Clark's brief career appear even briefer than it actually was. The exhibition omits his most complex and adventurous late pieces – *Conical Intersect* in two Parisian townhouses beside the Pompidou Centre



and *Office Baroque* in Antwerp, where he cut through all five storeys of a 1930s building. Nor does it include any of the photocollages he made to try to capture the dizzying spatial effects of his interventions. And to gain an understanding of Matta-Clark's influence (on Frank Gehry, for instance), or of the later interpretation of his work, the overpriced catalogue is not the best source.

For an exhibition that focuses on a key moment in the history of New York, it does little to evoke the time. Where are the

newspaper cuttings and television clips that highlight the period and its issues? Where too is an installation reflecting the spirit of the work on show? Sporadically, the gallery comes alive with performances, primarily of pieces by Trisha Brown. But otherwise, enshrining much that was only ephemeral, it feels like a mausoleum.

ANDREW MEAD

If you pass your hand through Anthony McCall's beam, you will see the fat white line is edged with pink and green

EXHIBITION /
Anthony McCall
Works on Paper
 Sprüth Magers, London
www.spruethmagers.com

Anthony McCall
Vertical Works
 Ambika P3, London
www.p3exhibitions.com

Public knowledge of contemporary artists is subject to much caprice: the few household names are known either for their *enfant terrible* status or because of their supersized pieces in the public realm. Think Damien Hirst's formaldehyde shark or Antony Gormley's *Angel of the North*.

So, despite a wonderful retrospective at the Serpentine in 2007–09, Anthony McCall has remained shamefully unknown. This will predictably change, given that McCall has recently won a commission from the 2012 Cultural Olympiad to construct the *Projected Column* in Liverpool: a 5km high swirl of steam and cloud rising above the city, visible from Lancaster to Llandudno.

Although the spectacle of the column will do much to raise McCall's profile in the UK, this grand public commission will surely struggle to match the sublime works on show in Sprüth Magers' exhibition of McCall's drawings and vertical works that ran in March. The Vertical Works have been installed in the vast, industrial hangar that is Ambika P3 in London. They are simply

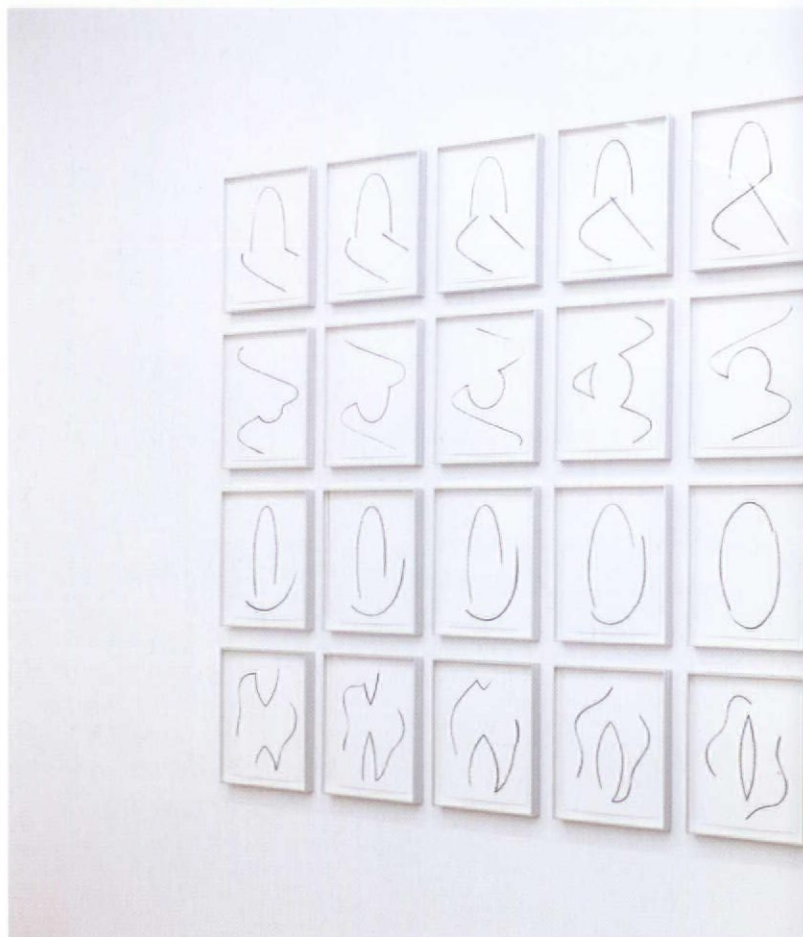
incredible: animated line drawings projected onto the floor from 10 metres up, result in huge, conical tents of light. The shapes shift and vary in degrees of opacity, to create sculptures of solid light.

The four works entitled *Breath*, *Breath III*, *Meeting You Halfway* and *You*, the Vertical Works make visible Isaac Newton's observation about the nature of light: it isn't actually white but a mixture of colours where each shade corresponds to a particular wavelength. If you pass your hand through McCall's beam, you will see the fat white line is actually edged with pink and green: a wonderful detail.

Despite inevitable comparisons with James Turrell and Thierry Dreyfus, McCall's work is different. Turrell and Dreyfus use light to transform an existing space; McCall uses light to *create* space. And the difference is remarkable. These are works to look at, but also to interact with. You can move in and out of the structures created by the light, or run your hand through the light wall. It's as engaging to observe people interacting with the works as it is to observe the works themselves. McCall's light pieces equally unsettle and fascinate.

When I visited the exhibition, people spent more time peering at the works through their camera phones than looking at them purely with their eyes. This called to mind Susan Sontag's observation that photography is often used as a defence

Below _ Anthony McCall, Installation of works on paper at Sprüth Magers London, 2011



mechanism and suggests that people feel uncomfortable in the face of the extraordinary.

I found it astonishing that light and haze could create spatial definition on this scale. Sitting in the dark looking at the works, I kept coming back to the world of pure mathematics and its favourite concept of 'elegant simplicity' – a work need not be complicated to be effective.

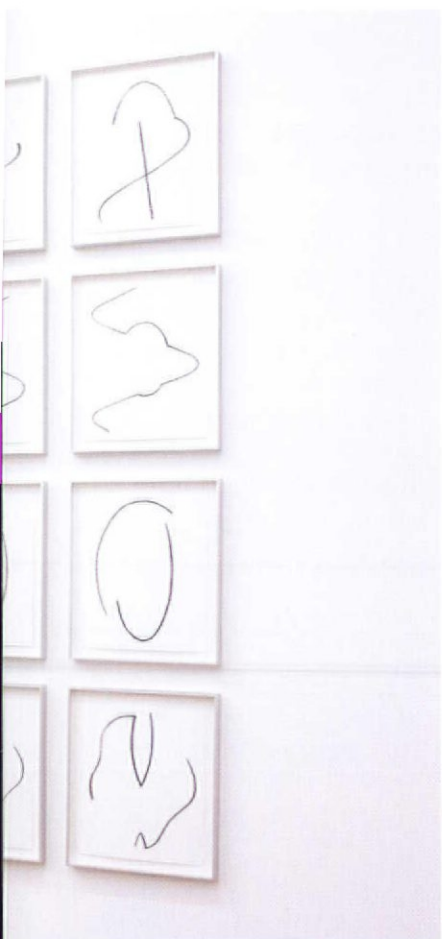
The works also act as an exercise in the art of looking, or perceiving, what is present. There is a strange feeling that comes over you the longer you

look at the works, a feeling that you can't be sure what you are looking at: are the Vertical Works light or architecture, do they move or are they stationary?

Neuroscientist V.S. Ramachandran offers a brilliantly irreverent take on this particular conundrum: 'It is as if each of us is hallucinating all the time and what we call perception involves merely selecting the one hallucination that best matches the current input.'

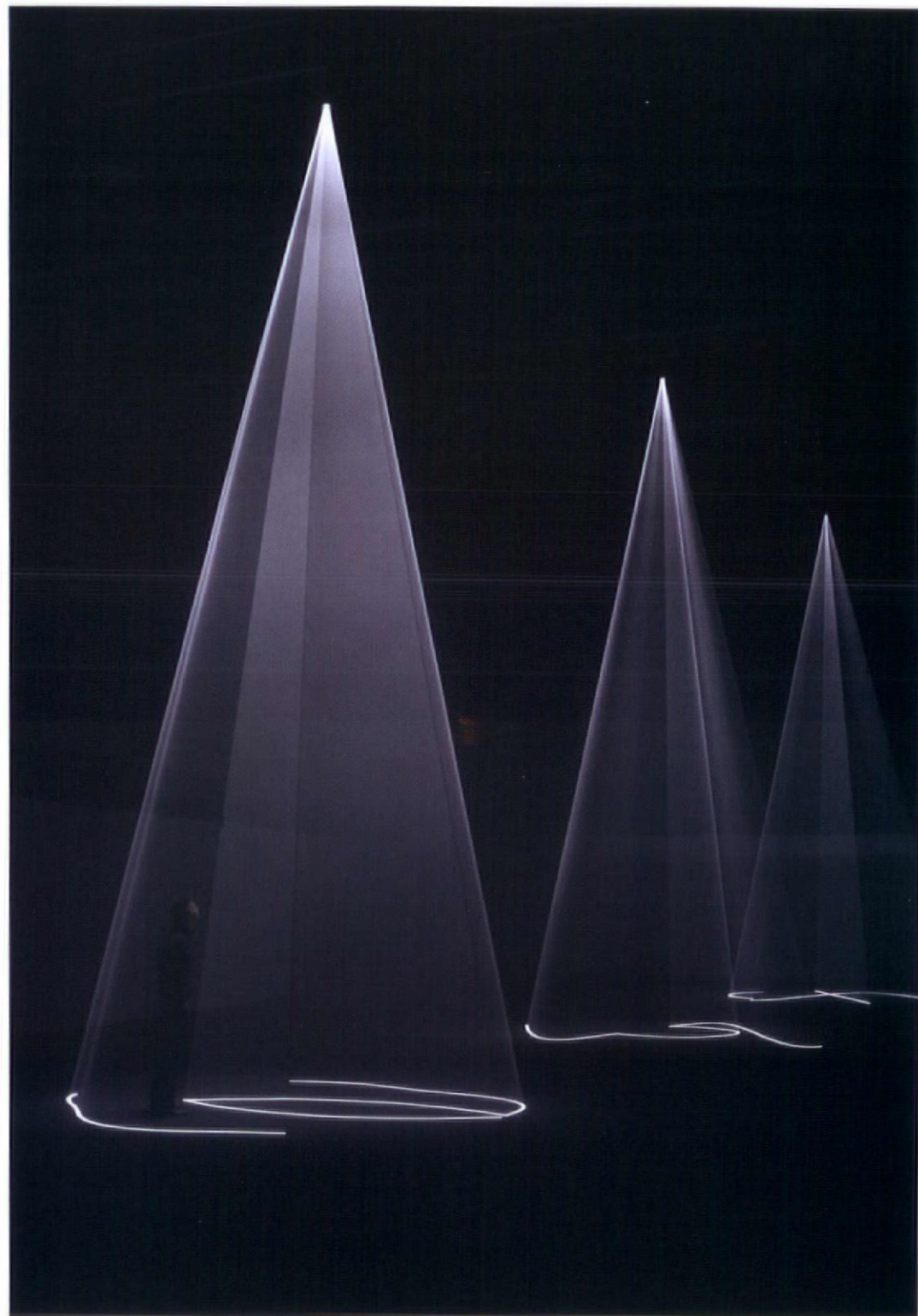
In some cases, being reminded of how complicated and imprecise the act of looking

Below_ Anthony McCall, Installation of Vertical Works at Ambika P3, London, 2011



actually is can be an overwhelming experience, even a bit depressing to the viewer. But the wonder of McCall's vertical works is that no matter how beautiful the sight of his light sculptures may be, the unsettling feeling of not being quite certain what you are looking at is even more powerful.

CRYSTAL BENNES



COURTESY THE ARTIST AND SPRÜTH MAGERS BERLIN LONDON/PHOTO: STEPHEN WHITE



UNIVERSITY OF
CAMBRIDGE

Department of Architecture

The Sir Arthur Marshall Visiting Professorship of Sustainable Urban Design

£64,637 per annum, pro rata; part-time / limited tenure

The Department of Architecture invites applications for the annual Sir Arthur Marshall Visiting Professorship of Sustainable Urban Design for the current academic year onwards.

Each Professor will be an expert in urban design, supplementing academic excellence with practical knowledge of the realities of sustainable urban planning. The post offers the scope to contribute to studio and research projects on urban design, with the flexibility to develop interdisciplinary approaches on sustainability issues across the University and beyond. The post-holder will have the opportunity to collaborate not only with the University's students and researchers, but also with practitioners and the local development community, and to contribute to high quality, sustainable design projects. The Visiting Professor will be expected to participate in teaching, research and outreach programmes in various ways, such as: giving a prestigious public lecture; conducting studio projects for students; and leading a seminar on the future development of the Cambridge region and beyond. There will be one appointment each year and the post-holder will normally be expected to be in Cambridge either full-time for one academic term, or part-time throughout the academic year.

Further information about the Department, the Professorship and the method of application is available from the Department's website at www.arct.cam.ac.uk or by emailing recruitment@aha.cam.ac.uk. The closing date for applications is 7 April 2011. The University is committed to Equality of Opportunity.

Discover global architecture online.

architectural-review.com keeps you informed of the latest ideas, innovations and creations from around the world. As a source of stimulation and inspiration it is unrivalled.

REGISTER FOR FREE NOW TO:

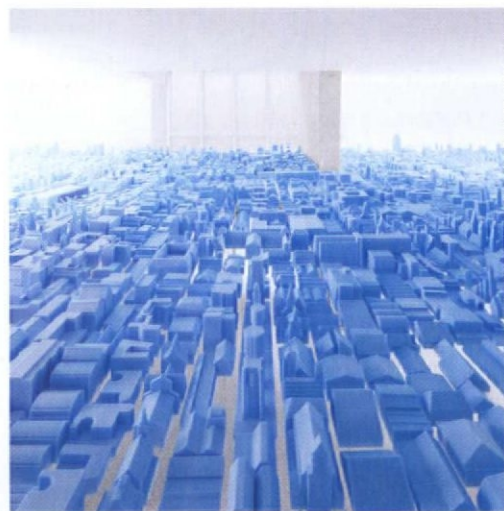
- Gain access to over 100 building case studies
- Uncover inspirational ideas from leading global architects
- Search our online archive for award-winning visuals and essays dating back to the 1930s
- Find in-depth coverage of every style and shape of influential architectural project

PLUS Download exclusive reports and features

AR078b



To register visit www.architectural-review.com
call 020 7728 4651 or email customerservices@arplus.com





*Project: Saxo Bank Headquarters, Hellerup, Denmark
Architect: Christian Lund
Design: Kollision
Installation: Taintec*

Engineered for the eye

A unique reactive ceiling of colour and light makes the mundane exciting at Saxo Bank as visitors are immersed in an interactive light experience, which reinforces the company's reputation for innovative solutions.

Martin Professional is setting new standards in LED-based lighting performance that open up all new possibilities for modern design.

**THE RESULT -
PERFECT COLOUR
REPRODUCTION
GUARANTEED**

Martin
www.martinpro.co.uk



uonuo
exclusively from Strata Tiles

Inspired by Warhol, this fine porcelain stoneware will ensure commercial and living spaces will never feel the same again!

Download the new brochure at
www.stratatiles.co.uk/uonuo

HEAD OFFICE
Strata Tiles Ltd
Polar House
6 Midleton Industrial Estate,
Guildford, Surrey, GU2 8XW

SHOWROOM
Studio 62
62 Clerkenwell Road
London,
EC1M 5PX

Tel: 0800 012 1454
Web: www.stratatiles.co.uk
Email: info@stratatiles.co.uk

DELIGHT

'Dreams, like cities, shape us and are shaped by us' – this is the premise for *Dream Isle*, CJ Lim's and Studio 8's depiction of London as a Victorian sponge cake. Produced for a travelling exhibition commissioned by Toyo Ito and Peter Cook, it became the departure point for *Short Stories: London in Two-and-a-half Dimensions* (Routledge), a Joycean pictorial novel published by CJ Lim and Ed Liu at the end of March.

Painstakingly made from hand-cut paper and card and bits that were bought from cake shops and supermarkets, the cake's craftiness aims to evoke a fictional filmic dreamscape of London, which, in Lim's words, 'places familiar locations into unexpected environments, transforming our preconceived notion of each chosen location and the city.' Truly the splicing on the cake.

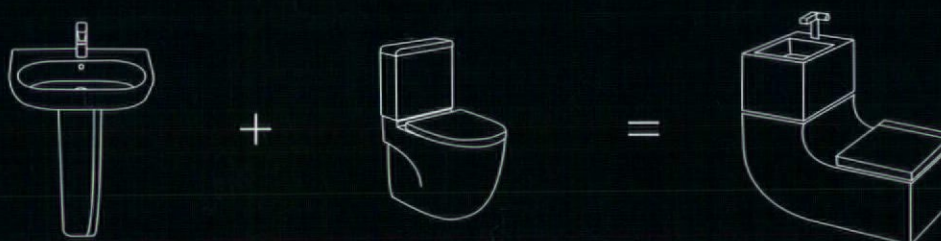
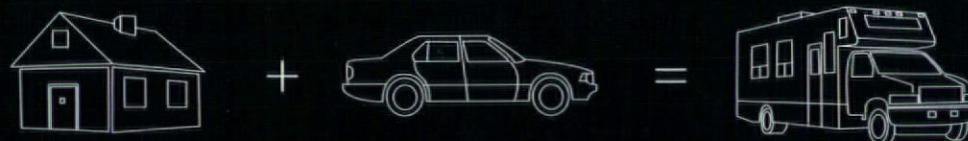




Outlook The future holds no limits –
USM grows forward into your space of tomorrow.

USA: USM U. Schaerer Sons Inc., 28–30 Greene St., New York, NY 10013, Phone +1 212 371 1230
International: USM U. Schärer Söhne AG, 3110 Münsingen Switzerland, Phone +41 31 720 72 72
Showrooms: Berlin, Bern, Düsseldorf, Hamburg, New York, Paris, Tokyo
info@usm.com, www.usm.com

USM
Modular Furniture



DESIGN + SUSTAINABILITY = W + W

W+W has arisen from Roca's ambition upon incorporating new, unique and innovative solutions into bathrooms. This solution combines design and sustainability as it brings the toilet together with the washbasin in a single piece. An eye-catching design makes it ideal for compact spaces, although its most innovative feature is technology that allows water from the washbasin to be reused to fill the toilet's cistern. A unique product that Roca has made a reality.

Roca THE LEADING GLOBAL
BATHROOM BRAND
www.roca.com