

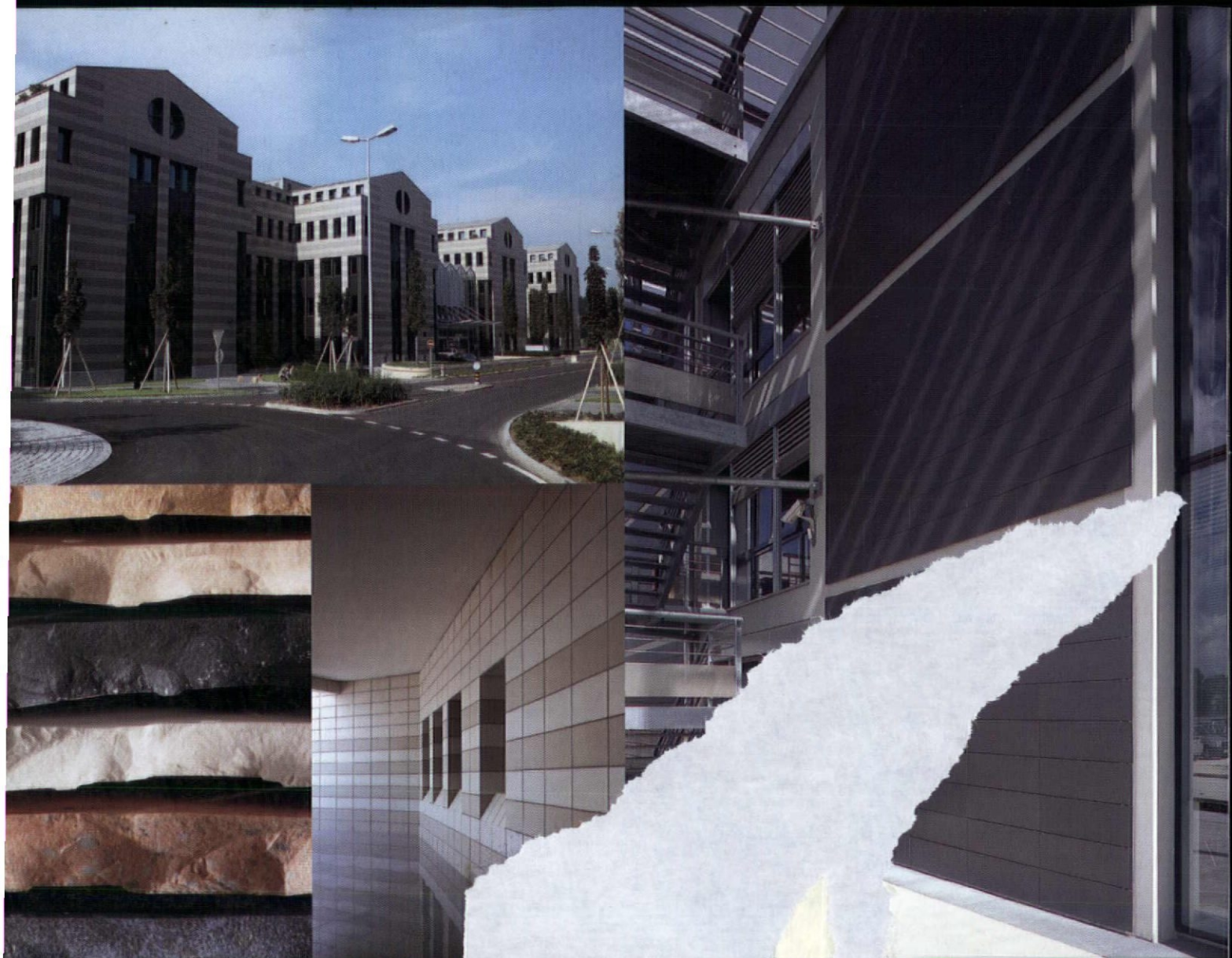
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This balsa and plywood model of a new PPG 7 contemporary house and landscape in Cambridgeshire Fenland by Jonathan Ellis-Miller is one of the exhibits in the architecture room (Gallery VII) in this year's Royal Academy Summer Exhibition. The four-bedroom house, designed to resemble a geological outcrop, will be woven into the landscape of its flat fenland site. The palette is to include terraced earthworks, wattle fencing, and green roofs with a frame of dark-stained timber, recalling the black soil and old forests of the area. The exhibition runs from 8 June-16 August. Turn to pages 16-22 to see the winning projects in the AJ/Bovis Royal Academy Awards, presented to the best architectural exhibits, and for a full preview of the show.

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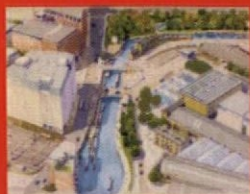
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Wales Millennium Centre, Cardiff

Image provided by Percy Thomas Architects

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at King's Cross
» page 6-7

“This is an uncivilised, immoral, disgraceful system that is a scam and a failure”
Ian Salisbury attacks PFI » page 9

aj news

Rogers unit to go, say mayor hopefuls

Two of the three front-runners in London's forthcoming mayoral election have vowed to shut down Richard Rogers' Architecture and Urbanism Unit at City Hall.

Tory Steven Norris and Liberal Democrat Simon Hughes – both speaking at the Architecture Foundation's 'Shape of London' debate, sponsored by the AJ – said they would look instead to other sources of architectural advice.

Norris said there was no reason to support Rogers' approach. 'I like Richard as a man,' he told the audience. 'But I cannot stand the Lloyd's Building, almost as much as I hate City Hall.'

And Hughes agreed that the unit should go, preferring instead advice from the many local authorities and amenity groups. 'I do not like central directives and I would much prefer to see a thousand flowers bloom,' he added.

The candidates also agreed in other areas, with both Hughes and Norris prepared to retain the London Plan, if elected, with only 'minor tweaks'.

Hackney amasses £1.4m to fund Clissold crusade

Design chiefs and lawyers have amassed a £1.4 million fighting fund to pinpoint problems and blame at north London's blighted Clissold Leisure Centre.

Hackney council revealed last week how much it would spend on its legal crusade, looking into problems at the centre designed by Hodder Associates. It has already clocked up £615,000 on fees for lawyers, architects and engineers to list damage.

So far the team has come up with about 40 problems – ranging from leaking roofs to cracking walls. The Stoke Newington building was shut down in December after extra costs of about £10 million pushed the building bill to more than £30 million.

Hackney is using Brent-based architect Bickerdike Allen Partners, engineer Arup and its in-house legal team to scout out the faults and wage war in the courts if necessary.

'The litigation is over time delays and cost overruns on the centre, not defects,' said a council spokeswoman. 'We are looking to go into mediation in June to arrive at a settlement without a lengthy court action.'

She said Bickerdike Allen Partners and Arup would carry out a 'full forensic investigation'. This

would include hacking off plaster, removing tiles and powering up the building to simulate conditions in full use.

The team would give a point-by-point breakdown of what was wrong and how much repairs would cost. She said the report would also say how long the repair work would take and look at where fault lied in the construction team.

'This report is absolutely key because we will be much more clear on what's going on. There are no quick fixes and it will be a long journey before the centre is reopened,' she added.

In the meantime, Hackney was keeping locals up to date with a newsletter, and last month gave 200 'extremely frustrated' people a tour of the Clissold centre. Some of the £1.4 million will pay for transporting local children to other sports centres until repairs are completed.

Hodder Associates' Stephen Hodder, who was unavailable for comment, earlier this year spoke of his 'dismay' at Hackney's handling of the problems with the centre (AJ 12.2.04). The architect said the first he heard of problems was when journalists contacted him.

Jez Abbott



The largest passenger bridge in the world spanning a taxiway was unveiled last week. The 197m-long glass and metal, fully enclosed bridge by Wilkinson Eyre Architects and engineer Arup allows access across an aircraft taxiway at Gatwick Airport. The 2,400-tonne prefabricated bridge was built 1.5km from the site before two massive cranes hoisted it in place. Architect Jim Eyre described 'the idea of walking above moving aeroplanes' as 'very special'. And Arup project director Stephanos Samaras agreed. 'Preassembling a bridge on this scale and moving it into place without disrupting the airport is extremely ambitious,' the engineer said. 'The passion that has gone into this design has made a real difference to the project.'



What's going on in
Architecture Week?
» page 10

“Alsop's attack on Bath betrays his
obsession with the spectacular at
the expense of the quietly elegant”

Planner David Beardmore lashes out at 'obsolete'
approaches to urban planning » pages 44-45

Design Review slates Waterloo skyscraper

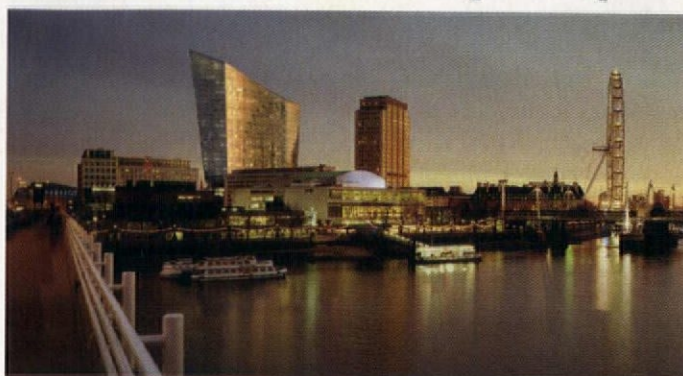
CABE's Design Review Committee has launched a searing attack on RHWL's plans for a 'sail-shaped skyscraper' on London's South Bank, saying the £250 million plans will 'please neither CABE nor cabbies'.

The watchdog was 'disappointed' with the 33-storey block near Waterloo and felt 'firmly that the design does not meet the standard of excellence required for a building of such prominence on the capital's skyline'.

Peter Stewart, director of the Design Review Committee, said: 'A project of this scale inevitably assumes a public aspect and everyone will have a view. We think the applicants need to do a lot more work to convince everyone this will be a great thing for the South Bank and the capital.'

The committee added that the plans did not compare favourably with that of other recent projects of such size and prominence, such as Foster's Swiss Re tower.

The committee was also unhappy with the quality and



The proposed sail-shaped tower would share the South Bank skyline

scale of the external spaces in the proposals – which were drawn up for P&O Developments on the Elizabeth House site next to the train station (AJ 11.3.04).

'Basic urban design and architectural concepts to do with the urban grain, public-realm design, quality of spaces proposed and the built form need to be addressed,' Stewart said.

'The insufficient analysis of external space concerns the committee, who suggest that important detailed design work is lacking,' he added.

CABE questioned planned vehicular and pedestrian routes, and suggested that plans to realign York Road had not been thought out enough.

However, Bill Edgerley, managing director of P&O Developments, said he was not too 'put out' by the CABE pasting.

'There are more fundamental issues than the shape of the tower and these include its relationship to the public realm,' he added. 'CABE has been supportive over the months but public views have to be taken on board.'

DUBLIN PLUMPS FOR DANNY

The Dublin Docklands Development Agency has appointed Daniel Libeskind to design a 2,000-seat performance arts centre as the centrepiece of a new €465 million (£310 million) regeneration scheme. The New York-based architect has promised to produce designs for 'a very beautiful building'.

BLAIR BACKS CROSSRAIL

Tony Blair has hinted that London's long-awaited Crossrail development will receive government backing. Speaking on regional news programme *London Tonight*, the prime minister admitted there have been funding problems but said he thought the £10 billion project 'has to happen for London'. ➕

ADAM'S STUDENT OFFER

Robert Adam Architects has announced a new annual travel scholarship of £1,500 for students that want to travel abroad to study traditional architecture and urban design. All post-Part 1 students, at any stage up to three years after the completion of Part 2, will be eligible. For more information visit www.robertadamarchitects.com

HSE design crackdown under way

An architect has been found guilty after a court case, which illustrates that safety chiefs are implementing threats aimed at forcing designers to help stamp out building-site danger.

Gloucester-based architect Neil Vesma was fined £500 last week and ordered to attend training to improve his awareness of health and safety issues in design.

Vesma, of Neil Vesma Architects, produced a design that included blocks weighing over 50 per cent more than maximum levels laid down by regulations.

Lawyers for the prosecution told the court that Vesma had specified blocks weighing more than 36kg when drawing up designs for a facade he was working on. The Health and Safety Executive (HSE) guidance – in the form of the Construction and Design Management Regulations – sets a maximum weight of 20kg.

The HSE spokeswoman said that tradesmen working on the site had complained of strain after working with the blocks.

'Apparently bricklayers on the site suffered back pain and were concerned enough to stop their younger colleagues working with them,' she added. 'The use of these heavy blocks is unusual because

they can be designed out in favour of lighter materials.'

The offence was discovered on a routine site check by the HSE and Vesma's case was heard at Coleford Magistrates' Court near the Forest of Dean on 25 May. Neil Vesma could not be contacted.

The case follows increasingly menacing arm-flexing by the HSE and National Audit Office, which are focusing on designers. Inspectors have warned that the only way to force architects and other construction designers to take their responsibilities seriously would be to prosecute them.

And a report by the National Audit Office recently upped the pressure again by attacking the health and safety record of architects and other designers (AJ 13.5.04).

Improving health and safety in the construction industry claimed most 'designers show little or no interest in understanding the health and safety implications of their work'. Up to 60 per cent of accidents could be traced to decisions taken before building work began, including during the design process, it said.

Ed Dorrell

A new departure for King's Cross

Allies and Morrison and Dimitri Porphyrios have made an outline planning application for these proposals for the King's Cross area.

The move marks a serious staging post in the four-year development of the scheme to regenerate the vast run-down brownfield site behind King's Cross and St Pancras stations.

The project – drawn up for a development team comprising Argent and St George – aims to transform the 27ha site during the next five years.

The developers, which were keen to use the combined skills of Classicist Porphyrios and the Modernism of Allies and Morrison, claim that the proposals will 'create a new urban quarter for the centre of London'. They believe the combination of the different architectural traditions, which were first used together in Birmingham's Brindleyplace, will successfully knit the scheme's new streets and thoroughfares into the surrounding London boroughs of Camden and Islington.

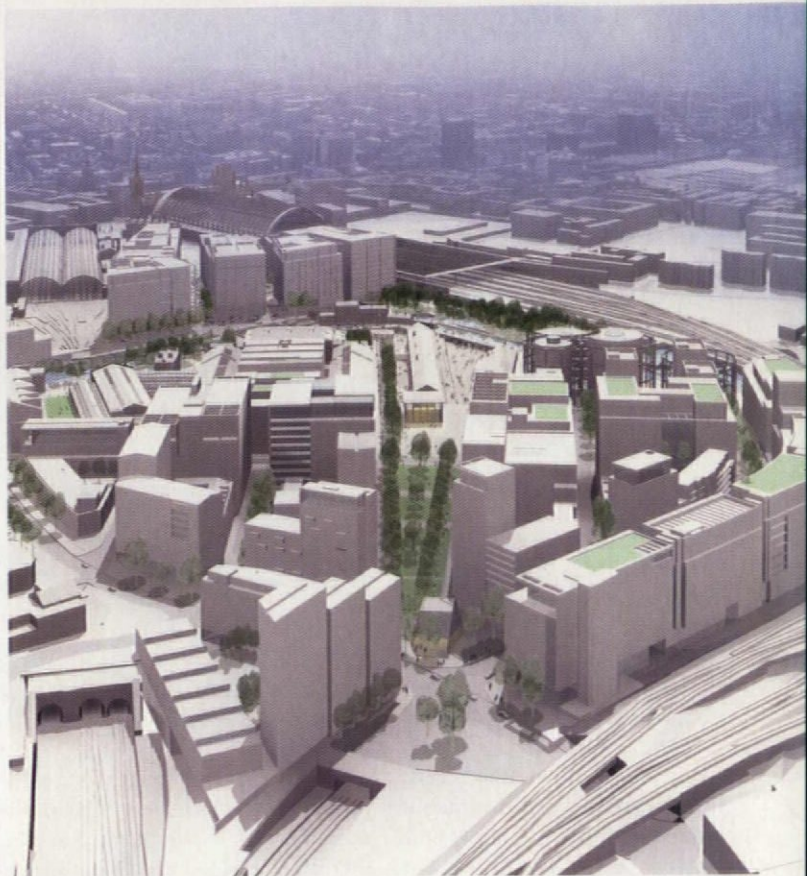
The project will create a massive amount of new office space, residential accommodation, shopping, hotels and leisure facilities.

It will also use the Regent's Canal – which intersects the site – as a regeneration tool, creating three new bridges across the waterway.

Porphyrios told the AJ that he was delighted with the scheme's development so far. 'It looks really great, and I think that is down to the interesting collaboration between myself and Allies and Morrison,' he said.

The Greek-born practitioner added that he was delighted that so many of his traditional urban design principles had been adopted on the project. 'Both the design teams believe in the rationalist principle of the human city and the primacy of public space,' he added.

Ed Dorrell



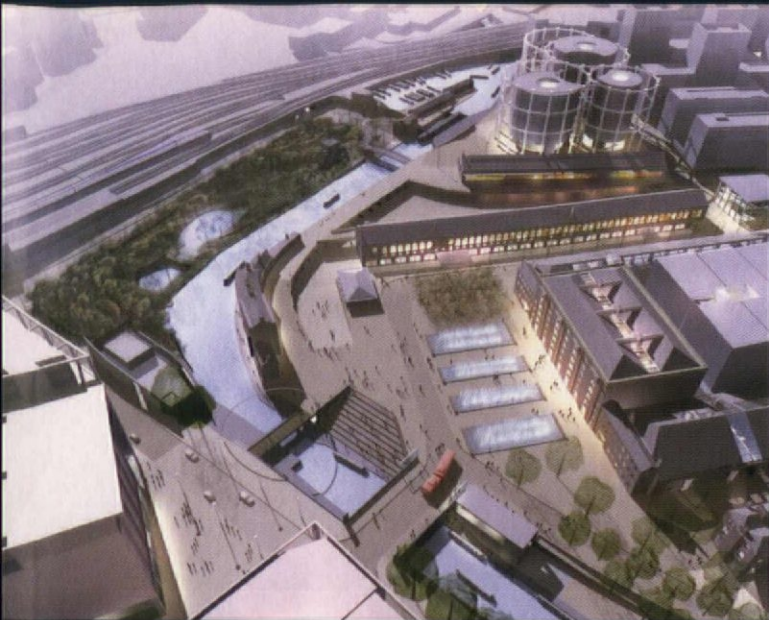
This model (looking north) illustrates the medium-rise masterplan

Station Square, at the south end of the King's Cross site, aims to be both the gateway and hub of the site



This boulevard – running north through the site – illustrates the massive scale of the retail development

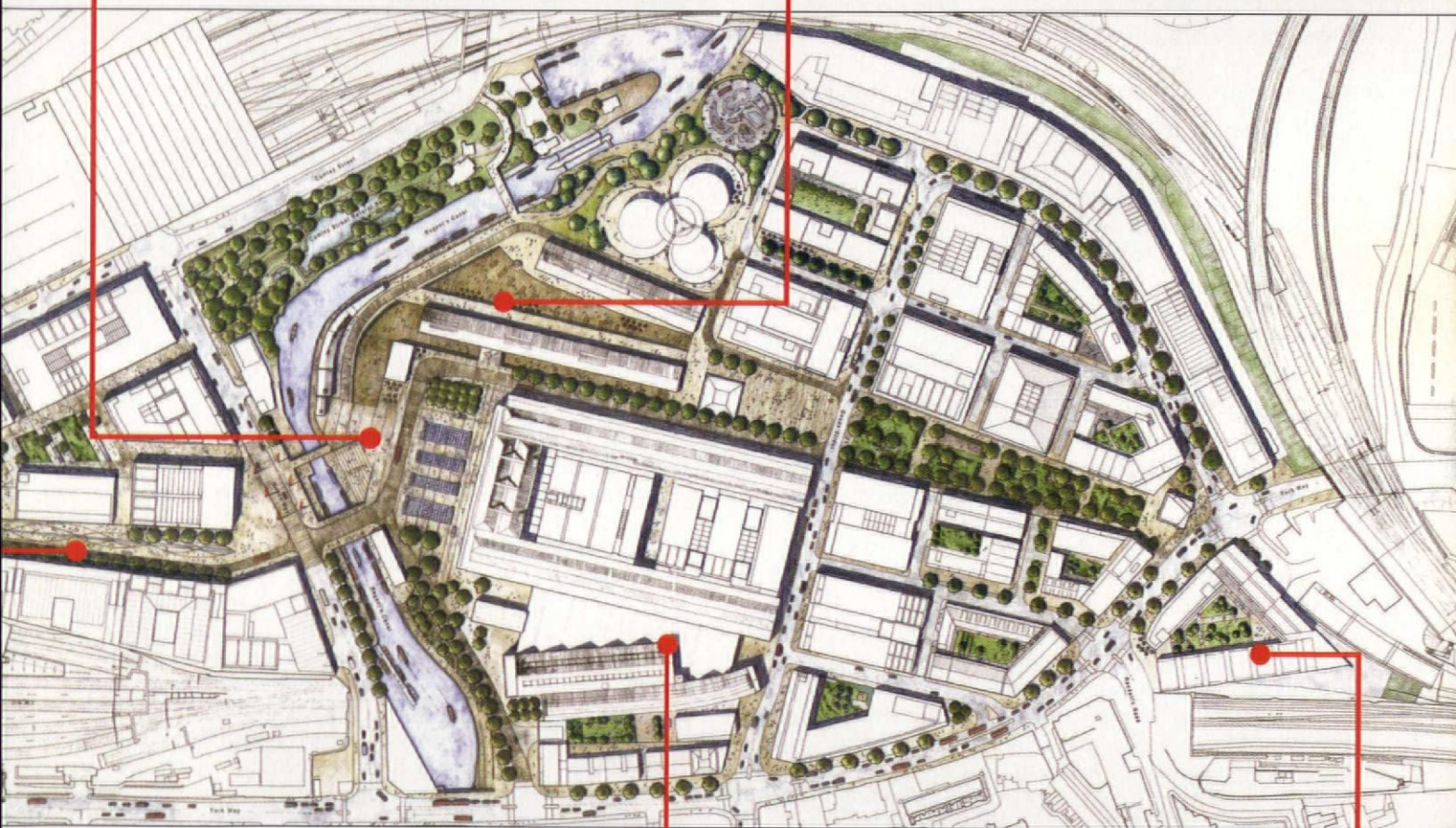




The designs aim to create three new bridges over the Regent's Canal – linking the south side to the new Granary Square



The scheme will use much of the existing railway architecture as part of its plans to regenerate the area



The masterplan proposes the creation of several new public spaces – including this new covered Midland Yard



The Triangle Site – the only area in the development that falls in the London Borough of Islington – sits at the north end



Gateway overrule a 'real concern'

Government support for a residential-dominated scheme in London's Hackney has triggered major concerns over the future make-up of the Thames Gateway.

The project by Gardner Stewart Architects – the new name for Tibbalds TM2 – was rejected by both the local planning authority and a public inquiry, only for these decisions to be overruled by the ODPM.

Local groups and SAVE Britain's Heritage have warned that John Prescott's decision to back the scheme sets a dangerous precedent for the rest of the Thames Gateway.

They are concerned that the project – which was originally dismissed because the practice failed to provide sufficient design details – could mean that Prescott is determined to give the green light to as many residential schemes as possible.

'This decision is seen by local planners as a test case for the local area and the massive development proposed in the rest of east London,' said Hackney Society director Malcolm Smith.

'The major problem is that there is a lack of design details in the application. The government's Sustainable Communities Plan says that only the best design will do,' he added. 'But this is far from

apparent in its decision to overrule the inspector's report.'

When the project, proposed for a 5.3ha site on the bank of the River Lea, is completed it will include a series of medium-rise buildings that will provide 613 new residential units.

But SAVE's director Adam Wilkinson warned that the scheme fails to match the requirements of the area.

'The ODPM's decision is a real concern, as we think that it is setting the planning atmosphere for the Thames Gateway development,' he told the AJ.

And he warned that the area would also be losing an important part of the local heritage when the scheme is constructed.

'We are very keen to save an interesting Belfast-trussed hangar that is being used as a timber yard at the moment,' he added. 'There seems no reason why it could not be converted into a community sports hall.'

However, Gardner Stewart's project architect Warren Hawling said he was pleased to have finally won planning and was 'excited' to be starting on site.

Ed Dorrell

Paris airport ruins spark China fears

The mangled remains of Paul Andreu's Paris airport lounge have sent jitters through the Chinese government, which is set to double-check the architect's £179 million National Theatre in Beijing to calm safety fears.

Andreu flew to Paris last week after the collapse at Charles de Gaulle Airport, which killed four people, but work has continued on the 6,000-seat theatre. Experts in China insisted they were open-minded and that the design may not have caused the disaster. 'We will probably relaunch a safety assessment of the whole project due to safety fears,' said a government-appointed official.

Wu Huanjia of Qinghua University's school of architecture said China had to 'learn a lesson and be more cautious' in the safety of Andreu's designs. 'But for the moment we cannot definitely conclude the airport walkway collapse was a result of the design,' he added.

Newts hold up plans for new urban village



PRP Architects' proposal for a Joseph Rowntree Foundation 'exemplar scheme' is now on hold indefinitely

Newts have brought work on a £40 million urban village to a standstill after the endangered animals colonised the site.

PRP Architects' plans for the 540 homes on the outskirts of York (AJ 30.10.03) were stopped after Great Crested Newts were found in torchlight searches on the site at Osbaldwick.

An outline planning application for the Joseph Rowntree Foundation, submitted six months ago, will be held up until the problem is solved.

'We are not in the business of trampling on the site in our size-12s and stamping on local wildlife,' said the foundation's director of development, Nigel Ingram. 'Some say it will affect the timing of the

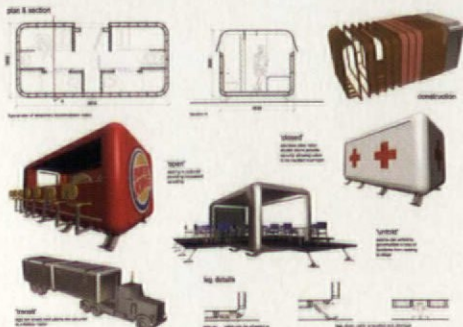
planning consent and that's yet to be decided.'

Another spokesman for the foundation said: 'There are all sorts of things we have to do with Defra [Department for Environment, Food and Rural Affairs] to ensure the newts are looked after. They have to be carefully protected, but it doesn't mean the whole scheme has to be stopped.'

An environmental impact assessment on the 21ha of grassland and National Grid property last year failed to uncover the newts. But the animals may have migrated since its completion, he claimed.

PRP Architects refused to comment but the City of York said it would work with English Nature to ensure the newts' safety if needed.

STUDENT SHOWCASE



James Cook, a fifth-year student at the University of Bath, has designed cabins that are based on a modular template to fit on to a standard flat-bed truck. They can be fitted out to provide a wide range of functions, from a small field hospital for emergency medical relief in a war zone to a mobile Burger King restaurant at the Glastonbury Festival, and temporary accommodation in-between. The cabins are constructed predominately from plywood ribs and clad in sheet ply and aluminium to ensure a robust, lightweight structure. A combined system of wheels and legs enables the cabins to remain level and stable in the worst Glastonbury mud.

Student Showcase is sponsored by Students' Union, a website set up by Union in association with The Architects' Journal at www.students-union.net. To submit work for publication in Student Showcase, email a publication quality image to ajstudentshowspace@emap.com



Rogers backs Owen in RIBA race as candidates call in the big guns

Richard Rogers has thrown his weight behind Valerie Owen's bid to become the next president of the RIBA.

The move represents a major boost to Owen's campaign in the last week of official lobbying after she was facing increasing criticism for her business-orientated approach.

Rogers wrote in a statement that Owen – who works as the managing director of inward investment agency London First – would be an enormous benefit to the institute.

'I warmly welcome Valerie Owen's candidacy,' Rogers said. 'She is business-like and talented, with excellent political skills. Valerie will make a dynamic leader for the profession.'

The candidate believes Rogers' support will indicate to the profession at large that she has the support of big name practitioners.

Owen – who is also a fully qualified planner and surveyor – rose to prominence in the '90s as the first female and youngest ever director of global property giants Jones Lang LaSalle.



Valerie Owen: 'a dynamic leader'

She has also won the backing of David Marks and Julia Barfield, the founders and architects behind the London Eye, and CBE commissioner Dickon Robinson.

'Owen is well-placed to broaden the appeal of the institute to architects working in related fields, and would take a proactive role in tackling the government's skills agenda to deliver regeneration,' Robinson said. 'I welcome her candidacy for RIBA president.'

However, the other candidates – Jack Pringle, Simon Foxell, Ian Salisbury, Richard Saxon and Brian Godfrey – are also lining up high-profile supporters from the architectural world.

Pringle, for example, has recruited the support of Will Alsop, Ian Ritchie, Ken Shuttleworth, Chris Wilkinson and the Bartlett's departing head of school, Peter Cook.

Voting papers are to be posted out to members within the next week, with a result expected towards the end of June.

Ed Dorrell

Fresh RSC threat as architect walks

Britain's first public building by a female architect is under threat after Erick van Egeraat walked out on a £100 million scheme, conservationists have warned.

The Royal Shakespeare Company's (RSC) new Stratford Theatre project includes proposals for a redesign or replacement of its main theatre, the Grade II Royal Shakespeare Theatre.

But the Twentieth Century Society believes the future of this Art Deco block, designed after a 1928 competition win by Elizabeth Scott, cousin of Sir Giles, may be under greater threat following van Egeraat's departure. Van Egeraat quit recently urging a 'rethink' of the scheme (AJ 27.5.04).

'The project needs someone of a really high calibre... with the same vigour as van Egeraat,' said the society's director Catherine Croft, who is keen to see the facade, main foyer and staircase saved from demolition.

'It's a great building and needs a contemporary architect to do something imaginative. The auditorium can go, so a highly creative solution is still possible. But the modern parts must be respected.'

Croft said van Egeraat had been happy to consult with the society on the theatre, described as a 'radical statement' by Nikolaus Pevsner. 'We had a good dialogue with the architects but they weren't in a position to take things forward. The client wasn't making decisions, not least because of the staff changes at the RSC,' she added.

Croft warned if the client tried to demolish the theatre the project would almost certainly go to public inquiry and 'slow down their timetable even more'.

Salisbury slams 'disgraceful' system in PFI tirade

Presidential candidate Ian Salisbury has upped the ante in his campaign by launching a blistering attack on the government's PFI procurement method.

Speaking at the only London hustings, Salisbury described the system as 'nothing short of a disgrace' and vowed to fight its continued use if he wins the forthcoming election.

'This is an uncivilised, immoral, disgraceful system that is a scam and a failure,' the Oxford-based practitioner told the audience. 'As an institute we desperately need to do something about it.'

'As a country, we are borrowing and buying on the future of our children in this monstrous system. It is our kids that will have the clay on their shoes when it all goes wrong.'

'This is a deceit and an immoral concept. The cream just keeps coming to the top. Believe me, I know about the way that this works as I was brought in to look at the new eye-hospital in Oxford.'

'The designs were a failure and the whole project is having to be remodelled before the staff even move in,' Salisbury added. 'We need to do something before it's too late.'

The other candidates were more restrained on the issue. Simon Foxell – the author of the institute's PFI policy document – argued there was no need to be so confrontational. 'There are a lot of things wrong with the system,' he said. 'But we need to work with the government to help them reform it.'

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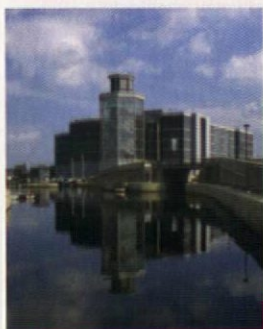
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A week's architectural interest

Architecture Week is once again on the horizon with events for all, from small children to the most seasoned practitioners. **Clive Walker** picks some of the most promising from the hundreds happening around the country

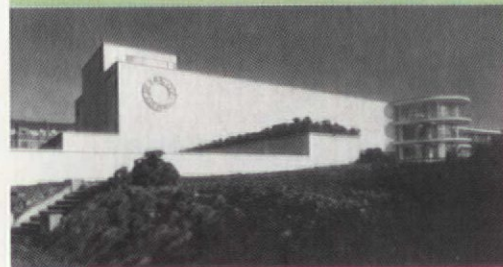
ShapeHouse free exhibition, Cambridge, 18-27 June

Described as a mix between a children's playhouse and a Chinese puzzle, ShapeHouse is designed to get people in Cambridgeshire thinking about the way they live. Its walls, doors and windows are daubed with cartoons and questions encouraging debate about the built environment. During Architecture Week you will have the chance to put forward ideas on renewable energy, 'grey-water' systems, recycling and green space in Cambridge and the surrounding region. Contact 01223 462606.



Re:Connect 04, Yorkshire, 19 June

The Royal Armouries building in Leeds is the venue for a debate exploring the reconnection of art, architecture and landscape within the city's varied spaces. Chaired by University of Sheffield head of architecture, Professor Jeremy Till, participants include Aadrian Geuze from West 8, and Design Commission for Wales chief executive, Carole-Anne Davies. Tickets cost £15 and £20. Contact 0113 245 6250.



Other events around the country will include:

Washington New Town, Tyne and Wear, was built as a futuristic utopia. Find out whether it fulfils the vision by joining a team of design experts aboard a free guided bus, leaving on 20 June at 1pm from Washington Arts Centre. Contact 0191 219 3462.

Edward Cullinan opens an exhibition of work by Nottingham University architecture students on 10 June at the School of the Built Environment, University Park, Nottingham. Contact 0115 9313155.

Northmoor, once a grim Manchester slum, has been regenerated into the UK's biggest Home Zone featuring contemporary three-storey housing. Tours of Northmoor, including an exhibition of the project at the Crowcroft Park, take place on 27 June. Contact 0161 860 6524.

Bristol Architects are showcasing their top projects all week outside The Architecture Centre, Narrow Quay, Bristol. Contact 0117 922 1540.

Colchester's architects will assess the local built environment at the official opening of

the town's Architecture Shop on 18 June. Contact 01206 577244.

Middlesbrough's plans to regenerate its civic quarter and Middlehaven Dock will be on show at the Town Hall, 24 June. Contact: 01642 728650.

Ever wish you could design your own dream building? Test run your ideas at the HoBB Project House and Gardens, Wales, between 21 and 23 June. Contact 01547 520925.

Text in the city is a series of architecture treasure hunts round Glasgow whereby participants receive clues direct to their mobile phone. Treasure hunts are staged on 19, 20, 26 and 27 June. Contact 0870 760 6165.

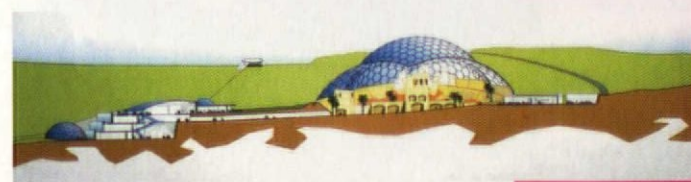
London Architecture Biennale in Clerkenwell, 18-28 June. Highlights include an exhibition of the Square Mile's best new architecture, tours of Clerkenwell's diverse architecture including the Barbican flats, a seminar on the future of London's built environment and the Pritzker Prize lecture by Zaha Hadid. Contact 0870 247 1207.

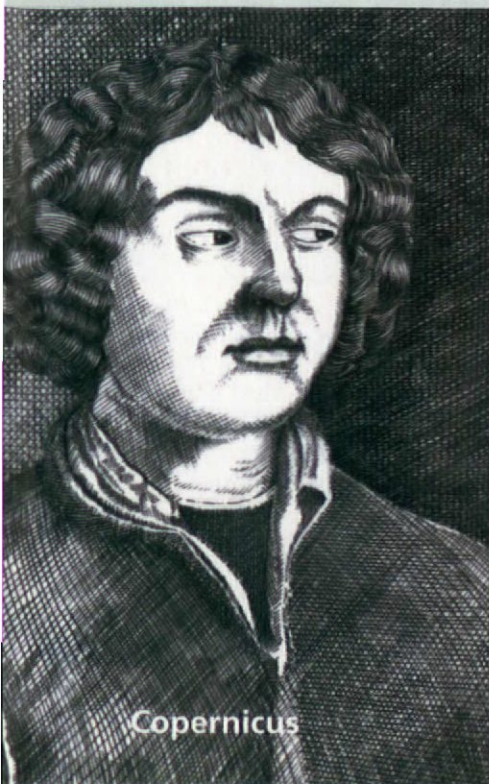
Making It Work, Hastings, 18 June

This conference will look at examples of design-led regeneration in Hastings and Bexhill. Presentations will be made by well-known practices including: John McAslan and Partners, showcasing its plans for the famous De La Warr Pavilion; Foster and Partners' £50 million scheme to develop Pelham Place into a hotel and retail complex; and Michael Hopkins and Partners' new Station Plaza, a mixed-use development including 120 new homes. CABE's learning and development director Chris Murray will chair the debate. Tickets cost £10 and £40. Contact 01634 401166.

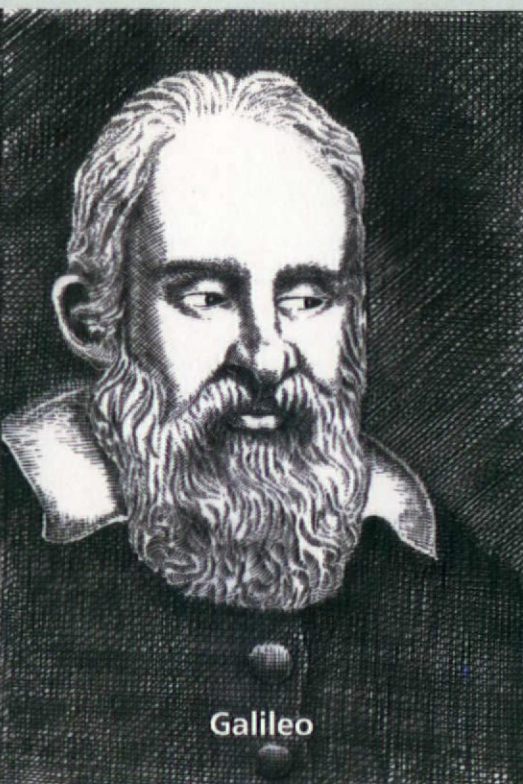
Eden - The Next Generation, Cornwall, 25 June

Learn about the next phase of striking architecture planned by Grimshaw for the Eden Project. Opened in 2001, the project combines ecology, horticulture, science, art and architecture. More than 100,000 plants from the various climatic zones of the world are on show. Visitors during Architecture Week will have the chance to view new works from a specially built viewing platform. Tickets cost £12. Contact 01752 265927.





Copernicus

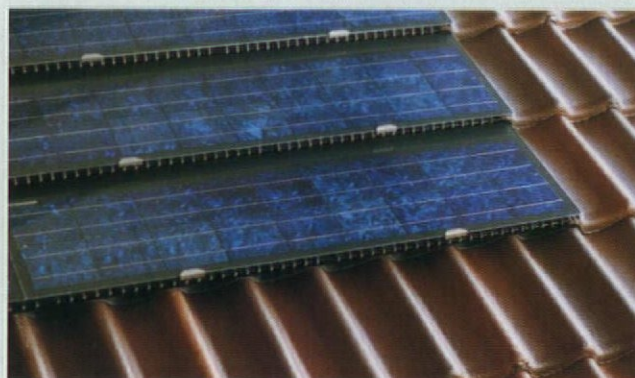


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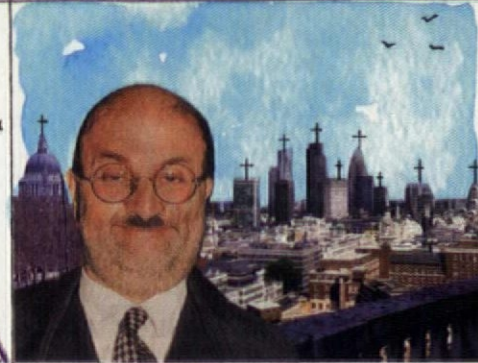
Sue Stainable *The Low Energy Party*
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Julian Lepenis *The Enoch-Was-Right Party*
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(Formerly Revolutionary Socialists Anti-war Alliance)
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who said what

'The Scottish Parliament is Britain's most important new building, the last construction of one of Europe's most original architects and a wonderful symbol for the nation. It is absurd to think it could ever have been realised for the initial figure of £40m, the cost of a municipal leisure centre. The new office building for Westminster MPs, Portcullis House, a lumpen pudding that does nothing for Westminster, London or architecture, cost £250m'

Edwin Heathcote, *FT Magazine*, 29.5.04

'Brits have two problems — they are too conventional and can't bring themselves to believe in the fantastic. People here think architects are plumbers. For me experiment is paramount'

Zaha Hadid, *The Independent on Sunday*, 30.5.68

'Big developers are urban Domestros: they kill 99% of all known existing character'

Hugh Pearman, *Sunday Times*, 30.5.04

vital statistics

- French engineers are on the verge of completing the world's highest bridge. Contractors have rolled into place the final section of the 245m-high structure, which spans the River Tarn at Millau in the southern area of the Massif Central.
- New research has claimed that the north-south divide in Britain's housing market is closing quickly. During the first quarter of this year, house prices in the North jumped a staggering 25 per cent while they increased by just 9 per cent in the South.
- The Italian village famous for being the birthplace of Leonardo da Vinci has amazed outsiders by constructing 172 parking spaces especially for couples to make love in. The mayor of Vinci council said it was a necessity after research showed that nine out of 10 adults have used their cars for the purpose.
- Fidel Castro, Cuba's communist dictator, could live until he is 140, his doctors have claimed. Geriatrics specialist Dr Eugenio Housain pointed out that, at 76, the Cuban leader still runs and swims on a daily basis.

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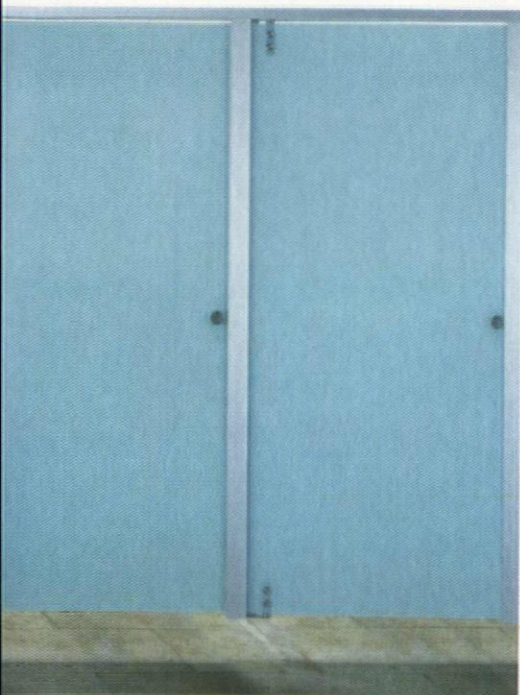
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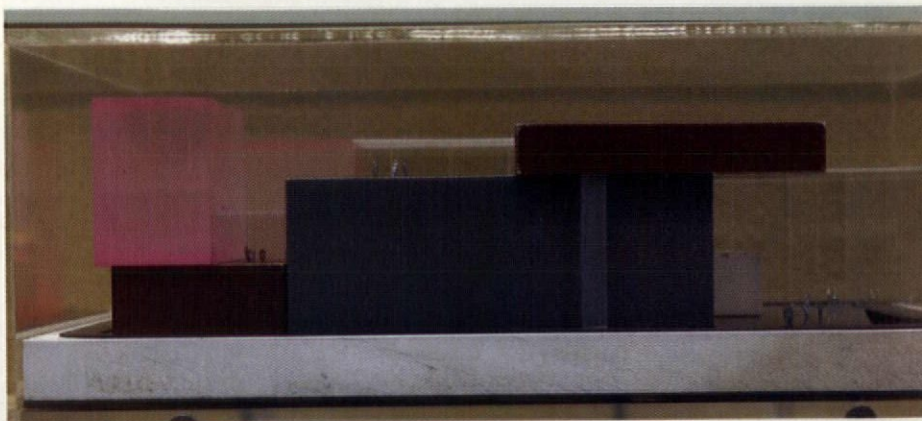


Top pivoted doors enable minimal stainless steel strips instead of large, unsightly metal patches.



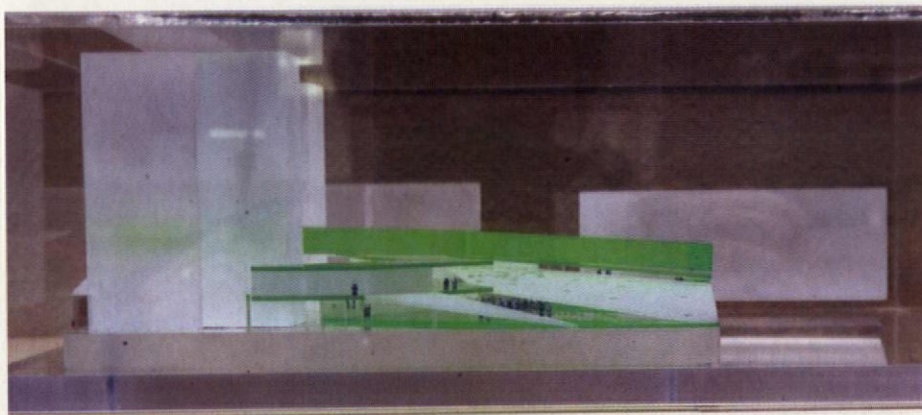
CNC turned stainless steel feet. Bolted into the floor and set out of sight 200mm. back from front of cubicle.

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Winner: first-time exhibitor

Concept models for Concert and Congress Hall in Uppsala, Sweden (*above*), and Stockport Town Hall (*below*) by Brisac Gonzalez Architects

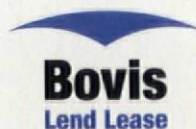


Room with a view

Next week sees the opening of the Royal Academy's annual Summer Exhibition. Gordon Benson's model of Benson & Forsyth's Battersea Power Station housing project picked up the £10,000 AJ/Bovis Award for the best piece of work in the architecture room, while a pair of models by Brisac Gonzalez Architects was awarded the £5,000 prize for best piece by a first-time exhibitor.

Kenneth Powell reviews the show

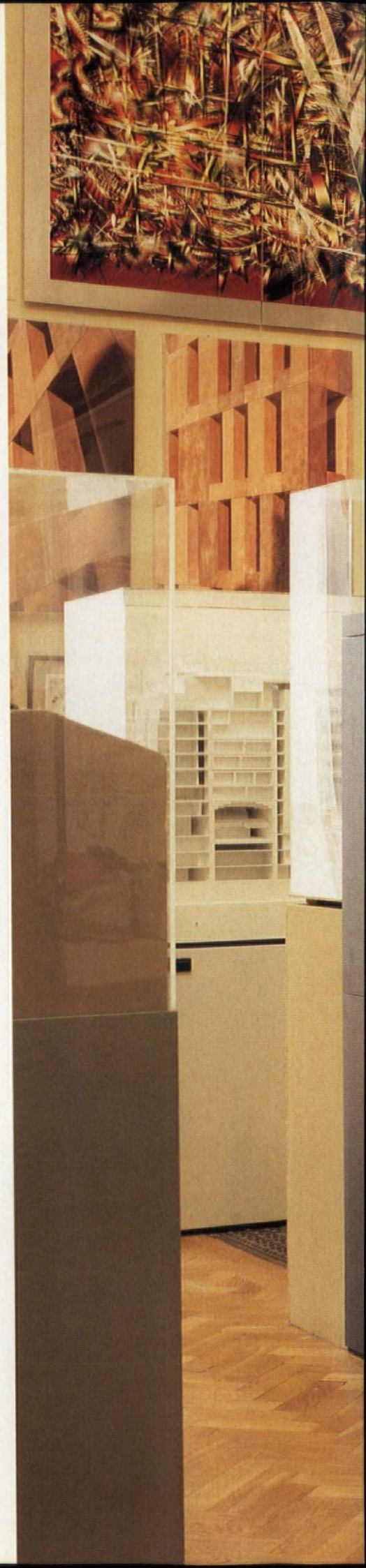
Photographs by Charles Glover



Year after year, a visit to the architecture room at the Royal Academy Summer Exhibition raises the same questions. Most obviously, there is the question: what is the purpose and value of this densely packed cross-section through the current architectural scene? Now that the Summer Exhibition is gaining increasing artistic respectability, the architecture room admittedly seems a less incongruous addition than it used to. It is both a reassertion of the place of architecture as an art and a good opportu-

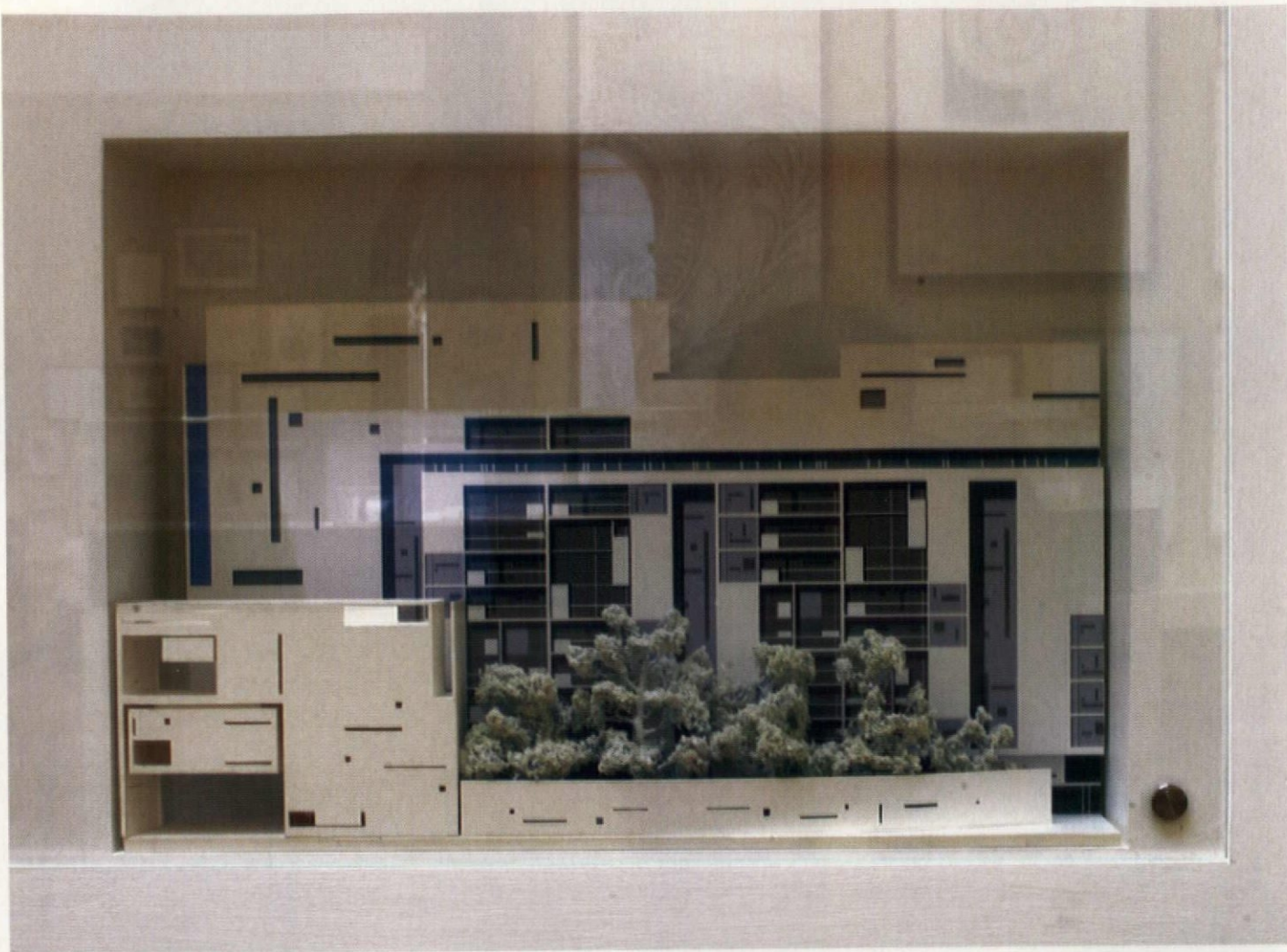
nity to present it to a large, non-specialist audience – far larger than any show at the RIBA could hope to attract.

That said, a further question needs to be asked: why isn't there more of an effort to explain the work on display and really engage the visitor? The unhelpful descriptions in the catalogue – labels are banned – do not reveal if a model or drawing depicts a built scheme, one that is going to be built or a pure fantasy, nor is there any indication of the location/context of the project. (Where

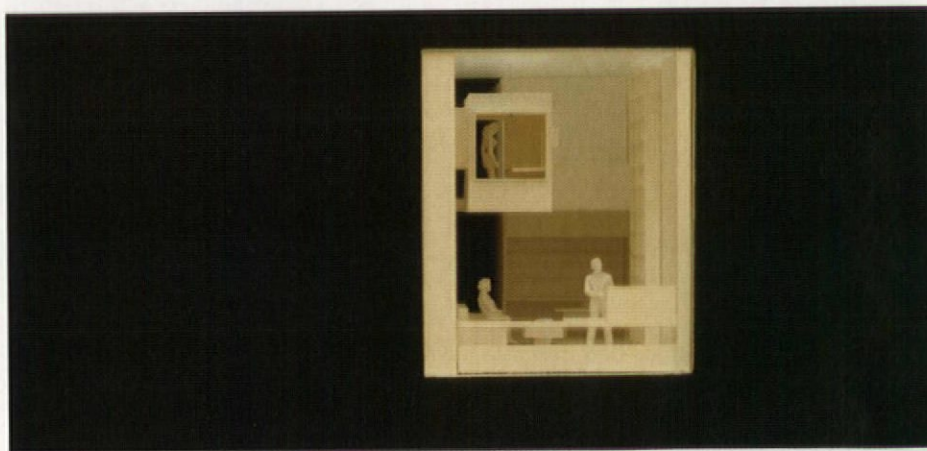




Winner: main prize
The Royal Academy's Gallery VII
with Gordon Benson's winning
model in the foreground



Elevational model (above) and detailed interior view (right) of Benson & Forsyth's Battersea Power Station residential project. Both are part of the larger composition, shown on page 17



is 'Arragon Mooar', for instance, the site of a house by Julian Bicknell? Presumably not close to Ilkley Moor...) And there is the inevitable and perennial pressure on space, so that some exhibits are hung so high as to be illegible. (In one or two cases, this is the best place for them.)

However, this year's Academician selectors (Eva Jiricna, Edward Cullinan and Piers Gough) have done a good job. There have been some duff architecture rooms in recent memory but this is not one of them. The hang is dense but not uncomfortably packed, and the range of work on show is impeccably catholic. In years far past, Raymond Erith (the centenary of whose birth occurs this year) was the lone representative of the Classical tradition in the academy. His

pupil and successor, Quinlan Terry, subsequently became a regular exhibitor at the Summer Exhibition. This year, it's the turn of Terry's son, Francis, who exhibits two stunning drawings of Classical details. If the vigour of this work could be translated into buildings, traditionalism might have a future. These drawings can be enjoyed as works of art in their own right, with no knowledge of the buildings to which the details might relate. Many of the exhibits, in contrast, were generated by purely practical considerations, principally for the purposes of the planning system or to reassure clients.

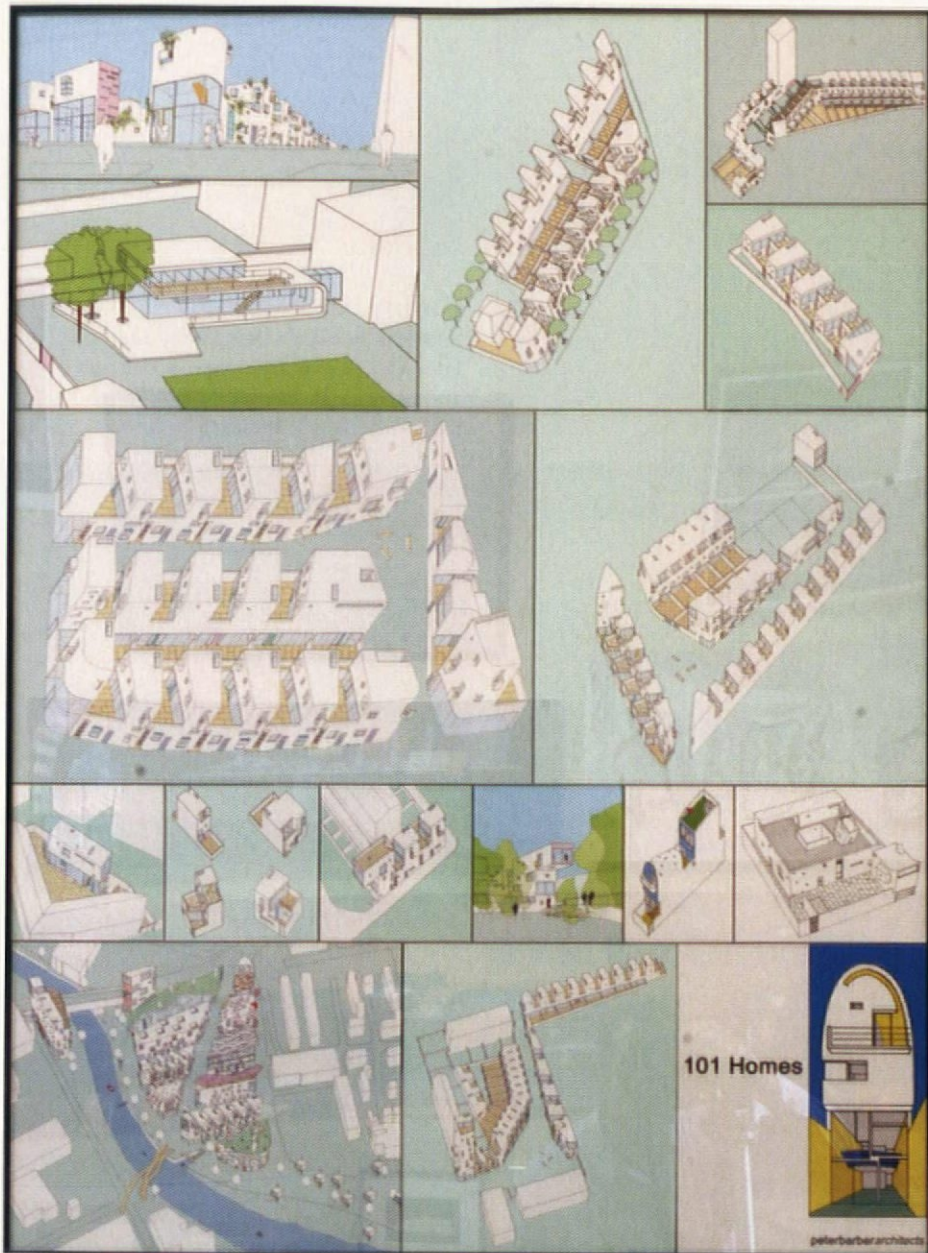
One of Erith's contemporaries and friends at the academy was Philip Powell, whose recent passing is marked by a commemorative display selected by his former

assistant, Paul Koralek. Photographs of Churchill Gardens, the Skylon, Chichester Festival Theatre and other projects by Powell & Moya explain why the partnership's work is still so admired – and so relevant.

Academicians, of course, are entitled to show up to six works in the Summer Exhibition. Full marks here to the ever-modest Piers Gough, who settles for just one small drawing – of the studio he designed many years ago for Allen Jones, one of the two RAs in overall charge of this year's exhibition. Will Alsop settles for a technicolour model of his startling master-plan for central Bradford. The academy's presiding heavyweights, Norman Foster and Richard Rogers, provide us with a run-down on their current major projects –

Highly commended

Axonometric views (below) and model (bottom right) of Peter Barber Architects' winning entry in the Architecture Foundation's 'Innovations in Housing' competition

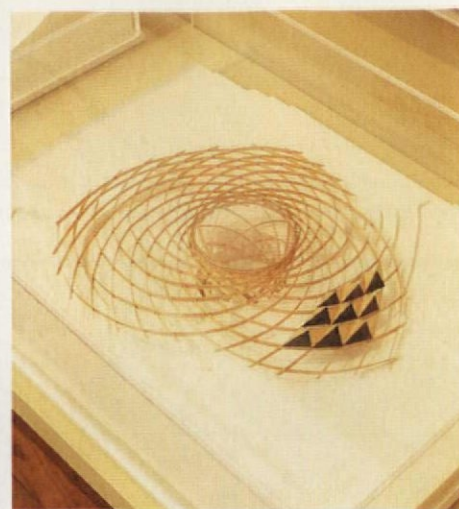
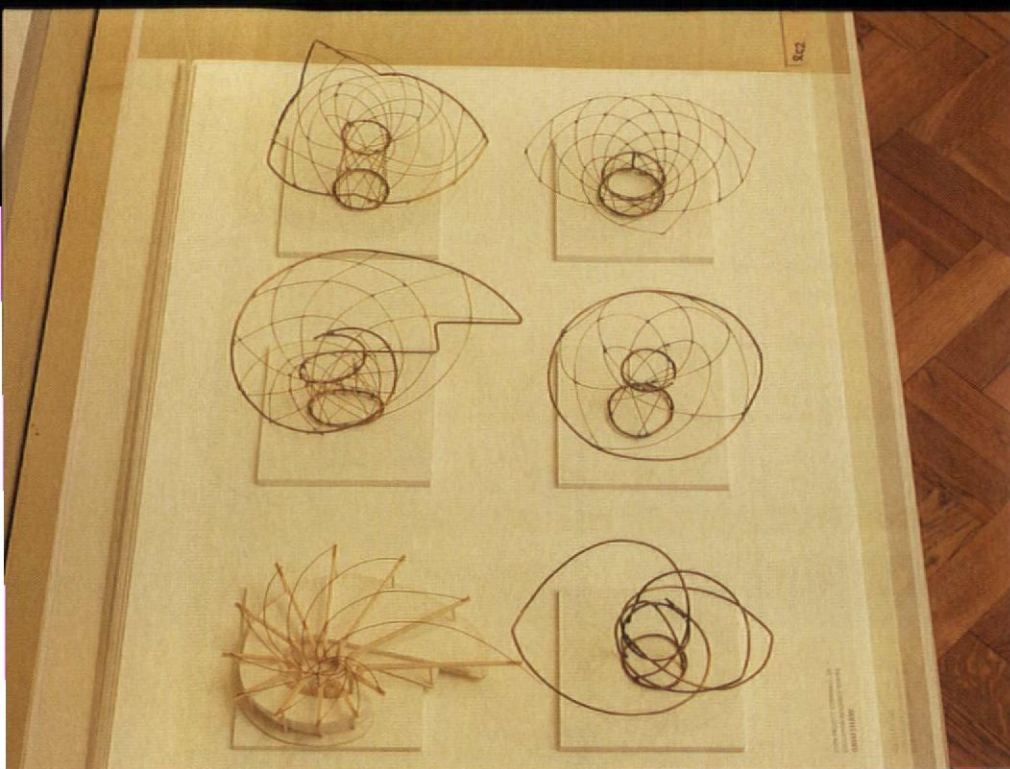


including the Smithsonian roof, Beijing Airport, the Elephant & Castle masterplan, Leadenhall Tower and Birmingham Library – but neither practice offers any surprises in terms of the fairly conventional renderings and models shown here. Foster's Beijing terminal is likely to be a fine building but will it really look so red? Michael Hopkins' information-packed model of a masterplan for part of Nottingham is more than most visitors will want to take in. In contrast, Nicholas Grimshaw's series of models explaining the genesis of the roof for his additions to the Eden Project are both engrossing and beautiful, and a good example of how architects (and engineers) can communicate their skills to the public.

Unlike Roman Catholic cardinals, Academicians are neither forcibly retired nor obliged to take a back seat when they reach a certain age. Two senior figures, Colin St John Wilson and Leonard Manasseh, having stepped back from active practice, use the Summer Exhibition to display examples of their drawing and painting, in both cases to delightful effect. Drawing is the central theme of the exhibition this year, Allen Jones and David Hockney have decreed, and architects have responded with gusto (although it's not clear if the drawings of the Disney Hall, Los Angeles, by Honorary Academician Frank Gehry are originals or blown-up prints. In either case, they reflect an extraordinary talent). A series of sketches by Daniel Libeskind illustrates what some reckon a

groundbreaking originality of expression, others a pursuit of form for form's sake. One of the lessons of this show is how important conventional drawing remains to architecture and how frequently misused, sometimes to bizarre effect, is the computer. Measured drawing is, however, represented here only by a rather lifeless record of a Wren tower.

The computer has yet to make the conventional model redundant. It remains an invaluable medium not only for presenting projects to clients and public but equally one used by architects to envisage and develop their work. In this respect, the working model by Skidmore, Owings & Merrill of its Schloss Velden project (what? where?) is another highly instructive exhibit. One hopes that the project, if it has moved for-



Highly commended

Initial study models (left) for the Eden Education Resource Centre roof structure and study model using Fibonacci spiral (above), both by Nicholas Grimshaw

Special mention

Right: four of the six exhibited drawings by Leonard Manasseh, including (clockwise, from top left) *The River, Carenac; Rocky Foreshore; In the Corner of a Wood*; and *Rushvelope*



ward to being built, retains the inventive force shown in the model.

Terry Farrell's colourful model of his unsuccessful masterplanning proposals for the Lea Valley Olympic site is a very different proposition, but genuinely useful in the way it relates the site to the wider context of the Thames and East End. Adam Richards' little model of the Flinthouse in Wiltshire – exact location and status of project, again, unknown – is a finely crafted piece of work on a small scale. I was also impressed by Simon Conder's model of a scheme in Cornwall, involving the refurbishment of an old house and a new-build element, and look forward to the finished product. In a different vein, M3

Architects, a real ideas practice, shows a tiny model of a beach-side hotel, resembling a giant light bulb – this is a project about which one really longs to know more. John McAslan's large-scale model of the remodelled Peter Jones store, on the other hand, tells you everything you really need to know about this mammoth, five-year reconstruction of a '30s listed landmark.

The architecture room is, or should be, a place to check the pulse of well-established practices and also to spot new talents. Ahrends, Burton and Koralek, well past its 40th birthday, seems to be in good shape judging by the competition-winning scheme for a new development on the sea-

front at Bexhill-upon-Sea. The furore that this proposal seems to have generated is misplaced, given that Eric Mendelsohn, no less, proposed substantial development adjacent to his now-iconic De La Warr Pavilion. And Peter Ahrends' scheme reflects the influence of Mendelsohn, without being in any respect a pastiche.

Ted Cullinan, who can certainly draw, has put in a drawing of Tiger Park, Castleford, that is, to use one of his own favourite adjectives, lovely. His practice, of like vintage to ABK, is also doing very nicely. Peter Cook, a recent recruit to the Royal Academy, seems to be on a creative high just as he reaches retirement age at the Bartlett, with some



Above: Daniel Libeskind's series of *Drawings for Chamber Music*, with a model of Richard Murphy's invited competition entry for the Brandhorst Collection Contemporary Art Gallery in Munich below



Above: Terry Farrell & Partners' Lower Lea Valley Regeneration and Olympic masterplan model



Right: Flinthouse, Wiltshire, by Adam Richards

enticing renderings of the foyers for the Leipaja Concert Hall. There is certainly plenty of innovative thinking going on at MacCormac Jamieson Prichard (MJP), judging from its outstanding – though sadly unsuccessful – submission to another concert hall competition, this time in Stavanger, Norway. MJP's Peter Hull, who is becoming an established master of the art, is responsible for a magnificent pencil drawing of the firm's West Cambridge project. And Allies & Morrison, which has moved on from the 'young lions' category to being one of London's larger commercial practices, exhibits a model of a development at Fulham Broadway that reflects its

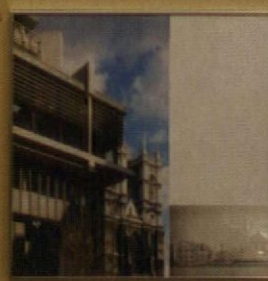
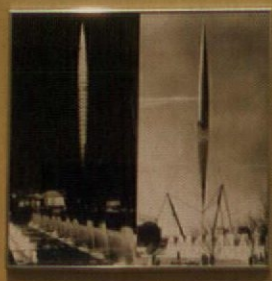
acclaimed concern for fine detailing.

It is appropriate in the year that Philip Powell, one of the creators of Churchill Gardens, is remembered that housing, as well as individual houses, features prominently in the exhibition. Among the younger practices showing really interesting work in this category are Tonkin Liu (certainly a firm to watch), Guy Greenfield (an apartment block at Westward Ho!), and Peter Barber, formerly with Will Alsop. Barber is fortunate to have the space, with a sizeable model and drawings, to illustrate what could be an outstanding urban housing scheme. The architecture is shapely but practical, the integration of buildings and

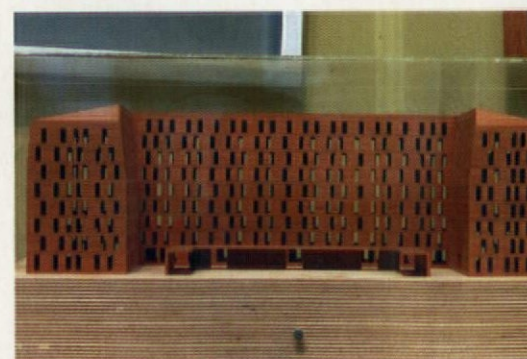
private and public open space excellently handled. For me, this project was one of the highlights of the show.

In contrast, the models illustrating a social housing scheme in Madrid designed by David Chipperfield suggest that abstract ideas are being pursued at the expense of the future residents of the scheme. The facades of the development will doubtless be well crafted but their monotonous regularity hardly raises the spirits. More disturbingly, the internal dimensions of the flats appear mean and cramped. Coming from an office that has produced some outstandingly beautiful private houses, this scheme, on the basis of what is exhibited, is disturbing and

Commemorative display of work by the late Philip Powell, selected by Paul Koralek. Includes (anti-clockwise, from top left) the Skylon; Slough Hospital; Churchill Gardens, Pimlico; Queen Elizabeth II Conference Centre; Chichester Festival Theatre; and Queens College, Cambridge



Above: Pencil drawing of Ionic capital by Francis Terry. Below: David Chipperfield's model of a social housing scheme in Madrid, Spain



certainly less than user-friendly.

Given the years that London's Battersea Power Station has been 'at risk', a crumbling eyesore alongside the rail tracks into Victoria, the prospect that work will soon start on site to realise the masterplan developed by former Royal Academy president Philip Dowson is truly heartening. There were fears that the development of housing, hotels and offices on the huge site surrounding the building might be over-intense but there is now every hope that a credible piece of new townscape will replace industrial dereliction. The partnership of Benson & Forsyth is responsible for the major element of housing and, judging from what is shown

at the Academy, it will be extremely good, developing ideas that have been present in the practice's work since the 1960s.

Benson & Forsyth's exhibit – winner of the main AJ/Bovis Award – depicts the scheme in considerable detail, so that the character of the development (soon to start on site) can be judged. This is a project designed – as housing should be – from the inside out, with the provision of enjoyable spaces for people as its priority. Gordon Benson and Alan Forsyth, best-known for their major museums in Edinburgh and Dublin, first worked together on housing schemes. It was an inspired move to recruit them as part of the Battersea

team. Just across the river from Churchill Gardens, their scheme looks set to embody those quiet virtues – above all human scale and urban sensibility – that makes the gardens a desirable place to live nearly 60 years after it was conceived.

THIS YEAR'S JUDGES...

Will Alsop, *Alsop Architects*
Richard McCormac,
McCormac Jamieson Prichard
Paul Finch, *group editorial director of The Architects' Journal*
Isabel Allen, *editor of The Architects' Journal*
John Spanswick, *Bovis*



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Life after the Opera House: did Zaha do Cardiff a favour?

While hurling insults at the Scottish Parliament has evolved into a national sport, the Wales Millennium Centre has suffered an even greater ignominy: complete indifference. Both projects were born out of an ambition to create a national symbol of international stature. While Scotland's controversial decision to entrust the symbol of Scottish democracy to a Catalan architect catapulted it into the headlines, Wales' rejection of Zaha Hadid's radical competition-winning proposal in favour of project by Percy Thomas Partnership effectively excused the building from serious scrutiny on the world stage. Its change in status from opera house (serious architecture) to Millennium Centre (something which will have to be bailed out in a couple of years time) reinforced the perception that the project had declined in stature. The merits or shortcomings of the chosen design faded into insignificance beside the incontrovertible fact that, depending on your point of view, the building: a) represented a victory for common sense over the forces of radicalism-run-wild; or b) epitomised the forces of conservatism and should not have been built at all.

Now it is finally taking shape, the building is proving worthy of attention in its own right. By an accident of history, Cardiff has inadvertently entrusted one of its major building projects to a Will Alsop scion, albeit one who operates under the shelter of a practice which can best be described as 'safe'. Jonathan Adams, the project architect, has responded by delivering a building which marries technical and formal ambition with a genuine attempt to grapple with more theoretical territory, not least the highly contentious issue of 'Welshness'. While not to everybody's taste, the incorporation of typography depicting poetry in both English and Welsh takes on particular significance in view of the symbolic role of language in Wales' on-going battle to reconcile its unique cultural identity and its relationship to the UK as a whole.

In retrospect, it seems that Hadid did, after all, play a positive role in moulding Cardiff's future. Had it not been preceded by Hadid's audacious radicalism, Percy Thomas Partnership's design might well have been dismissed as dangerously bold.

Isabel Allen

Speedy approval of PCC extension was ill-judged

The ODPM acted with unseemly haste in bringing the Statutory Instrument (SI) that enlarged the ARB's Professional Conduct Committee (PCC) into force, for alas it was on the statute book even before Dr Evan Harris and his parliamentary colleagues tabled their Praying Motion (News, AJ 27.5.04).

The importance of the Liberal Democrat motion is nevertheless undiminished, for it is an ancient and respected doctrine of our common law that nobody shall be a judge in their own cause. Enlarging the PCC, so as to include members of the board itself on the disciplinary tribunals, not only flies in the face of this principle, but fails on human rights compliance as well.

It is important that architects who neglect the reasonable expectations of professional conduct be sanctioned. But it is utterly wrong that the tribunals that judge them should in any way be influenced by those who are encumbered by their decisions in making the ARB's unlawful and over-reaching policies. That is both unfair and unjust – nobody should expect to be judged in that way.

It is curious to recall that the introduction of this SI was defeated in debate by the board, after it had considered at length the human rights issues that were introduced by Nick Tweddell and, in correspondence, by Mark Benzie. With that decision in mind, all board members appointed to the PCC should now resign from it under the terms of the principles of 'collective responsibility' that Bill Morris introduced in January and which the board, apart from me, accepted.

Ian Salisbury,
RIBA presidential candidate

OFT plural policy is a little prohibit too far

I am amused and amazed to read that the Office of Fair Trading (OFT) is pressurising the RIBA to prohibit sole architects from describing their firms as 'architects' in the plural.

Thirty years ago, when Max Boisot and I started in practice with a chartered surveyor partner, we received a threatening letter from the RIBA demanding to know whether a second architect (Max was not then registered) was part of the firm, since our letter-head used the plural.

Our solicitor (a young partner of Lord Goodman) wrote in the following terms: 'This is a matter of English usage. A firm of solicitors may comprise a solicitor and his dog. The same applies to architects.'

We heard no more.

Brian Waters, The Boisot Waters
Cohen Partnership, London

Code confusion removes conduct from equation

Your 'Code of Practice faces "pedantic" OFT pressure' article (AJ 27.5.04) will cause some confusion, because the RIBA does not have a 'code of practice' and is not changing its policy on practice names.

However, the RIBA is currently revising its Code of Professional Conduct as part of our ongoing strategy to make the profession more consumer-focused. As a separate issue, early last year the OFT asked us to reconsider undertakings 3.1 and 3.3 in the current code in light of new competitions legislation. As a result, these undertakings were suspended by the RIBA Council in July 2003, pending the issue of our new code. The final draft of the new Code of Professional Conduct is due to be considered by the RIBA Council in September 2004.

The RIBA's guidance on practice names has existed since January 1987, and was last sig-

nificantly updated in 1998. It has simply been incorporated as an annex to the guidance note on advertising, which will accompany the new code.

Richard Brindley,
RIBA director of practice

The Pringle appreciation society starts here



Jack Pringle is not a power player. Professional maturity, competence, experience, knowledge and an understanding of the RIBA's workings are intrinsic to him, making him best placed to be the next RIBA president.

Starting his career as a salaried architect at Powell & Moya, he was involved with the Salaried Architects Group when he first wrote the *RIBA Guide to Good Employment*. Later, progressing from a small office to build a practice of substantial repute, gave him the understanding of the full spectrum of the predicaments and delights of the architectural profession.

From the outset Pringle has given his time for the profession through his work for the RIBA, leading most major committees, such as the International Relations Board. He was chairman of the Professional Services Board and, at present, is vice-president of education among others.

It is difficult to imagine anybody else with such a vast knowledge of the needs and workings of the RIBA. Furthermore, Jack's past shows a true devotion, real care and understanding for the good of the profession.

His manifesto strikes at the pressing concerns and challenges that lie ahead of architects and the RIBA. He affirms that his candidacy is about architecture and architects regaining respect, and because of his knowledge and expertise he has positive solutions for the major concerns of the profession. He has proposals to tackle profitability and salaries, to help small practices and enhance 'consumer' codes of practice.

Pringle has a definite programme to review the present PFI and address its deficiencies with working alternatives.

In the current danger of the three-part architectural qualification and RIBA validation being scrapped, Pringle, as vice-president of education, has the expertise to fight so that courses in architecture provide the right training, and standards in education do not slump. At the same time, he offers real strategies and practical solutions for affording research, training and CPD.

Pringle also calls for respect for the RIBA and intends to solve the problem with the ARB.

The concerns in Pringle's manifesto indicate that his candidacy is not for self-interest and professional advancement, but because the needs and the future of architecture, architects and the RIBA are deep in his heart.

Tzena James, RIBA, Surrey

Defecting designer says the signs are all there

After seven years training and seven years practising as an architect, four years ago I crossed the great divide.

I lived that closeted existence of the architectural profession, thinking we could do everything. We designed our own logos, business cards, interiors, signage, etc. In a professional capacity I rarely came across a consultant from another facet of the design world.

This all changed when I first defected and went to work for a design consultancy. It was an exciting but humbling experience, working with graphic, fashion, interior and product designers. I realised that each of us had our place in the world of design and we all had something to offer in different ways. Design of any sort should be an integrated process and we can all learn from each other. Most importantly, I learnt that architects can't do everything!

I am now working for a consultancy which specialises in wayfinding and sign design. This was not a subject that featured in our architectural education. The movement of people through a building was, however, something we were keenly aware of. We designed space to encourage people to instinctively find their way around a building.

Working as a wayfinding consultant, I have learned to understand space and the public's perception of it in a completely different way. People do not understand space in the same way as trained architects do. The signals that are so obvious to us are not interpreted by the general population. People want, need and expect signs to give them confidence to move through a space. The fact that there is a rooflight above them is not enough to tell them that the lift they are waiting for only goes down.

Traditionally, architects have stayed away from designing an integrated sign strategy within their buildings. The purer the architectural form the better, and signage is clutter. Once the building (particularly if it is a public building) is handed over to the end user, the client usually recognises the need for a clear information strategy. A quick-fix solution is generally adopted with a minimal budget. Often by this stage the architect's involve-

ment is over and the result is a plethora of cheap signs in ill-considered locations. No wonder architects hate them.

This could all be avoided by recognising the need for a well-designed sign strategy when the initial budgets are being put together. Our most successful projects have been when we were involved in the project from the outset and worked side by side with the architect. Unfortunately both of these situations are rare. As wayfinding consultants, we do not make our money from selling signs – we sell elegant, considered design solutions and firmly believe that less is more.

I hope that if I ever decide to return to the other side, this experience of viewing my profession from behind enemy lines will make me a better architect. In the mean time I continue to pester my architect friends (I still have some!) to allocate more of their precious budget to signage.

Kirsty Morrison, The Holmes Wood Consultancy

A collection of mags you're bound to be after

We are having a massive clear-out in readiness for new carpet and we have *bound* copies of the AJ from January 1984-June 1995 and *bound* copies of the AR from 1984-1990. We also have all unbound copies since then. We would be happy to bequeath them to any interested readers prepared to collect them from our offices in Chelsea. Please contact me via email at shannon@christophersmallwood.co.uk

Shannon Cramer, Christopher Smallwood Architects, London

Please address letters to the editor at *The Architects' Journal*, 151 Rosebery Avenue, London EC1R 4GB, fax 020 7505 6701, or email angela.newton@emap.com to arrive by 10am on the Monday before publication.



Real architectural value reduced to sound bites

Massaged by the media, we live in a world of myths and fears. Tabloids and TV pander to our obsession with the 100 best/worst/escape/reality moments indulging both the myth of celebrity and the fear of catastrophe. But at least you can choose what you read and push the off button.

More insidious in an increasingly paranoid society is that our wider range of choices is being curtailed in a most pernicious way, by playing on those same emotions of myth and fear. Serious matters, such as the government's challenge to habeas corpus, have set a new model for the justification and presentation of constraints. It is for the greater good, will only infringe on the lives of those who are probably no good, someone must be responsible/punished, are the all-

other nonsense catchphrases as we buy off the environmental alarmists with the proliferation of inefficient technical gizmos. In reaction to the numbing propaganda of environmental righteousness, I am increasingly drawn to the counter orthodoxies offered by critics like Lomborg, 'The Skeptical Environmentalist' and Okonski, 'Adapt or Die'. Their contention, that the environmental gloom and doom merchants are failing to recognise the possibility of the progress of technology and the evolutionary history of adaptation, is attractive if only because it asks questions. We need intelligent debate on the relevance and accuracy of the vague (but always astonishing) figures offered in the setting of seemingly impossible targets, not censure for failing to toe the line.

The presentation of mythical costs and targets of projects completed 'on time/on budget' is easily done. When did you last see published figures of a project's cost that presented anything more than a skilfully edited version of the final account – or indeed the tender estimate? And anyway, the greatest delay is in planning; if you want to finish early, change the bureaucracy or start without permission. I'm not sure which of these two notions is the more fanciful.

The relevance of the manufacturing of cars to the construction of architecture is another myth promoted for fear of government censure. In fact, bespoke construction knocks spots off the automotive industry; and mass-produced cars are far more expensive per cubic metre than buildings leaving aside their appalling lifecycle costs. When you consider that they are often also subsidised, you can only wonder why we have fallen for all this dross.

The danger of accepting these new orthodoxies is that, despite appearances, nothing actually moves forward. We must question both the ideas and the presentation; otherwise we will be constrained into constructing buildings that are merely paper propaganda for untested myths that play on unproven fears.



too-common excuses. In all this, presentation is key: think of Bush/Blair and the official language of obfuscation used in their references to evidence of 'mass destruction programme-related activities'.

This duplicitous language of sound bites is everywhere, not least in the presentation and discussion of architecture. We talk of the environmental agenda, the manufacture of buildings and driving down cost targets – but not about building delightful architecture, the making of great places or how to ensure their long term value.

We glibly refer to the environmental aspects of projects with talk of audits and efficiencies, when we know construction struggles to achieve questionable targets. We speak of 'zero energy building' and repeat

Jon Moen, with brother William, provides the vision behind the award-winning Newhall development in Harlow, utilising design codes to bring quality to housing

John Prescott described it as having the 'wow' factor that so many housing developments lack. As the complex of 2,700 new homes at Newhall in Harlow, Essex (*Timber in Architecture*, AJ 27.5.04) slowly takes shape, it is apparent that this is no ordinary mass-housing scheme. Early phases by Proctor Matthews Architects and PCO have picked up numerous awards and houses are selling fast. So what is the secret of its success?

While refreshing architecture and innovative urban design clearly play an important role, they would not have been able to flourish were it not for Jon Moen, 'hands-on' landowner and visionary who, along with his brother William, took the decision to divide the 81ha site into 10 separate plots, and put each one out to a designer/developer competition within the framework of an overall masterplan – an approach that is widely used for green-field development in the Netherlands. The aim was to produce a varied but coherent development with a range of outstanding architecture. 'What we have done here is to free up the architect. They are usually quite shackled in conventional house development – it is a very developer-dominated environment,' says Moen.

Originally owned by his grandfather, the site, in the guise of Newhall Farm, has passed down through the generations. The Moen brothers feel a strong connection with the land and a sense of responsibility for the development currently under way.

Their first foray into development was disappointing but arguably it was this experience that was to become the catalyst for Newhall. Ten years ago the family sold an option agreement to a developer for part of the adjacent Church Langley development. 'We had very little room to manoeuvre under this agreement, no input to the design. The result was very ordinary, not at all what we had hoped for,' he says. 'The developer's focus was on speed and cost, not quality.'

Along with the depressing realisation that it was the 'accepted norm', Moen was particularly disturbed to find out how far down the pecking order the architect had become in the traditional arrangement. He was concerned that many developers paid scant regard to plans prepared by the architects they employed.



CHARLES GLOVER

Cracking the code

Often they were used as mere 'guidelines' and were simply a necessary evil to obtain planning consent.

'Newhall gave us a second chance and we wanted to make sure we really got it right,' he says. 'We teamed up with Roger Evans, who did the masterplanning. We all inspired each other to try and be as daring as possible, to do something different.' The Church Langley episode had not only sparked the inspiration but also provided the resources to fund the years of planning. 'Trying to push unconventional ideas through the system was extremely time-consuming. We were starting to use design codes before they were being talked about.'

While the combination of wealth and vision may portray Newhall as a kind of 'utopian playground' for the Moen broth-

ers, it is not that simple. Jon and William are not the only landowners: 'In fact, eight members of the family and five trusts have an interest in Newhall, so we need to demonstrate that we can get the same value from the land by doing good design. If we can't demonstrate that, we will have failed.'

So far the build costs have been about 10-15 per cent higher than a conventional property in Church Langley but, says Moen, 'we have been consistently selling at 10-15 per cent higher, so the developer margin is retained. We are learning a lot about how to achieve this.'

What separates Newhall from more conventional projects is the adoption of design codes rather than house types. 'It makes more work for the architect and developer and stretches the ability of the workforce, compounding the already severe skill

shortage. It can be costly, both in the organisation and actually getting it done.' But it is this very element that enables Newhall to stand out. One town square, for instance, will link four parcels of the development, bringing together four differing designs from four architects. This could be the recipe for a textbook hotchpotch but for the design codes, which incorporate a colour and materials palette derived from local sources, bringing continuity through the differing styles.

Moen expands: 'It depends, of course, what you mean by design codes. Our design codes are quite general in some ways but are very specific in areas where they need to be specific. On the other hand, we give complete freedom to the architectural design.'

Another challenge is the rate of build. 'We have done very well in getting the kinds of design we want, but we have done rather less well in increasing the rate of build. And we have to. We have to meet certain schedules set by the Local Authority. If we can't meet the targets there is a lot of pressure on the authority to grant permission to other developers to make up the shortfall.'

However, despite all the pressures of managing a project of this scale, the Moens are planning to get even more involved in the next phase by creating their own development company and essentially taking complete control. 'Even with our exhaustive selection process it has been a constant battle to get the developers to buy into the philosophy of what we are doing here.'

Asked whether he could envisage the success of Newhall being rolled out to other developments, Moen explained: 'We are working with CABE and are participating in a series of workshops to try and draw conclusions from sites that have used design codes – but it's not just using them, it's more about how you monitor and enforce them. It might not be that a private landowner would want to, or even have the resources to, get involved in the way we have. I think that there are lessons that can be learned and there are, of course, obvious opportunities for institutional landowners, hospitals, schools, etc, who could perhaps enforce design codes by writing them into the sale agreement.'

Newhall is a success – a fact reinforced by the recent 'Planning for New Neighbourhoods' award from the Royal Town Planning Institute. Having clearly found his mission in life, Moen concedes that his new life is a far cry from his training and upbringing on the farm. As if to underline this he muses: 'If I could come back again it would be as an architect.'

Michael Hammond



Memories of war shame today's tentative terrorist measures

News that Britain's emergency homeland officials and transport agencies have been working on plans for the evacuation of all or part of the population of London in the event of a major terrorist attack first appeared in the *International Herald Tribune* last month and was followed by a story with a slightly different slant in London's *Evening Standard* two or three days later.

Reminding its polyglot readership that London has a population of more than seven million, the *Tribune* reported that security officials had asked London's borough councils to identify large spaces capable of accommodating up to 250,000 people while they await buses and trains to evacuate them from the capital. Officials would also fan out to shepherd fleeing Londoners towards these secure areas, it said, and troops would be called in to quell any unrest among those seeking cover.

'These plans are unlikely ever to be used but we have to prepare for the very worst,' said a statement from deputy prime minister John Prescott. Despite this reassurance, the government also released two documents detailing procedures for decontaminating office buildings after chemical, biological or radiation attacks.

The second newspaper story appeared to focus on an aspect that the first report had missed, claiming that it was parliament that was to be evacuated to a secret location outside the capital, with no mention of the evacuation of the populace, nor even part of it. Instead, it clearly said that Peers and MPs will be spirited away to somewhere that will not be vulnerable – even to a direct terrorist attack on the Palace of Westminster itself.

Though the second story stressed that this relocation of parliament would only take place in almost unimaginably extreme circumstances – 'for the first time in 300 years' – the fact that this measure was not ruled out showed that it was considered acceptable, according to the *Standard*.

This, plus the fact that resonances of former parliamentary evacuations less distant than the 'Oxford Parliament' of 1681 were not dwelt on, must have seemed ominous to the sizeable portion of today's London population who remember the 'unimaginable circumstances' of 1940/41, when a superior German army was encamped a mere 21 miles from Dover and the German Air Force came even closer with a bomb that destroyed the Commons Chamber so that the House of Lords had to be used instead.

Rather than contemplate the removal of parliament from Westminster in those stirring times, the government concerned itself with such practical preparations for defeating an expected invasion as would put to shame the tentative measures under consideration today. For example, between January and September 1940, not only did industry produce and distribute five million steel air-raid shelters but, less well-known, manufactured 3.5 million papier mâché coffins in four weeks in the spring of 1940, when the fear of aerial bombardment was at its height.

But nothing can really compare for starkness and grandeur with the evacuation that took place at the same time. It is now estimated that, between the end of June and the first week of September 1939, some 3.75 million persons were moved from areas thought to be vulnerable to

bombing into areas thought to be safe. This evacuation was an immense sociological phenomenon whose effects can still be traced today. At its height, in September 1939, these population movements affected one third of the population of Great Britain. In one week in June 1940 nearly 100,000 children were evacuated from the London area alone.

There is a profound difference between evacuating parliament and evacuating people, just as there is a great difference between asking boroughs for holding sites and manufacturing coffins in advance.

'3.5 million
papier mâché
coffins were
made in four
weeks in the
spring of 1940,
when the fear
of aerial
bombardment
was at its height'

Ferhan Azman

Azman Owens Architects

When and where were you born?
1962, Bursa, Turkey.

What is your favourite building and why?

Hagia Sophia in Istanbul – as an architectural student it showed me what could be achieved.

What is your favourite restaurant/meal?

Korfez restaurant on the Asian coast of Istanbul. You get picked up by a small fishing boat from the European side of the town. You are served with drinks and taken to the restaurant, where they serve the most delicious grilled sea bass on a bed of salt.

What vehicle(s) do you own?
Mercedes Avant Garde 160.

What is your favourite film?
Seven Samurai by Akira Kurosawa.

What is your favourite book?
Slaughter House 5 by Kurt Vonnegut.

What is your favourite 'design classic'?

DCM Chair by Charles Eames.

What is the worst building you've ever seen and why?

Venturi, Scott Brown and Associates' extension to the National Gallery – what a pity. An excellent opportunity was wasted due to lack of fortitude.

Who or what is your biggest architectural influence and why?

Burak Uzman, my classmate at the architectural college in Istanbul, who introduced the truth about architecture to me.

Who is the most talented architect you've worked with?

Bryan Parkin, who at the moment works for the very fortunate Avanti Architects, because of the way he translates his experience of good architecture into his work.

If you hadn't been an architect, what would you have been?

Something to do with film-making.

What would your advice be to architectural students?

Try to work in the construction industry as soon as you start studying.

What would your motto be?
It's never too late.

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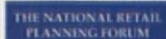
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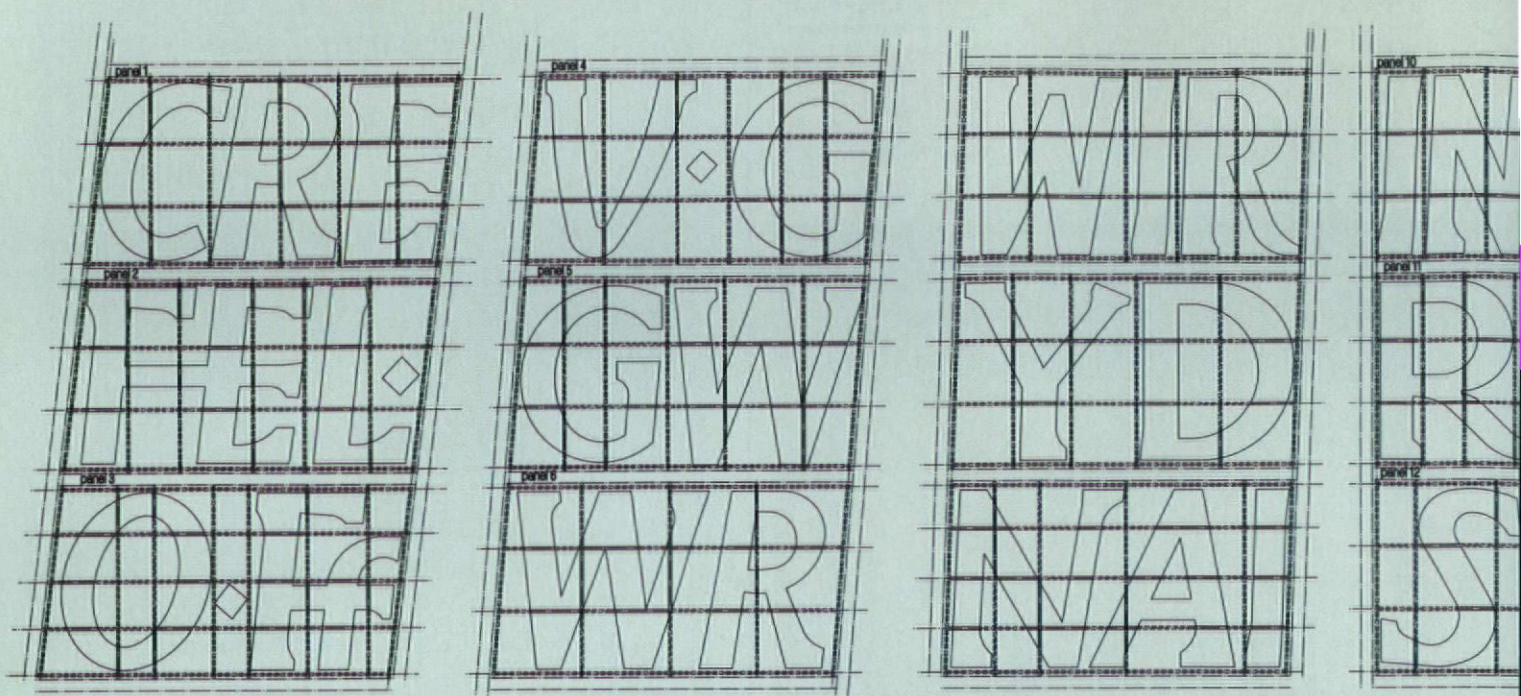
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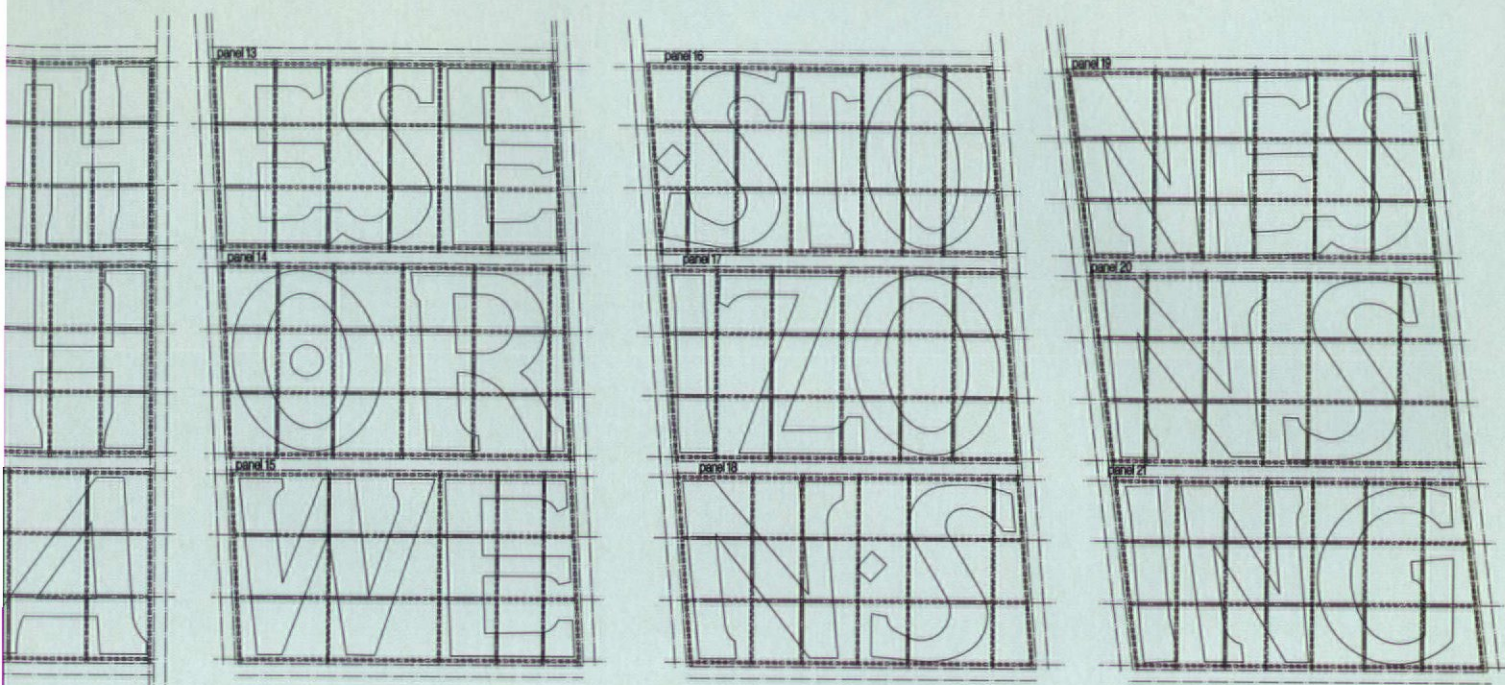
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Poetic licence

The Welsh National Opera's new home is due for completion in the autumn. Here we take a look behind the scenes at a highly contentious project

By Austin Williams

Alun Pugh AM, minister for culture, Welsh language and sport in the Welsh Assembly, is reputed to be 'delighted.' On 26 November, baritone Bryn Terfel is taking time out from his global commitments to open the Wales Millennium Centre (WMC) and kick-start a 60-hour extravaganza featuring, as the WMC website says, 'world-famous Welsh stars of stage and screen.' Max Boyce will be there.

The massive new auditorium being constructed in Cardiff – famously not designed by Zaha Hadid – is certainly a big Welsh deal,

enough to encourage Judith Isherwood to travel half way around the world, from her job as chief executive of the Sydney Opera House, to take charge.

Designed by local architectural firm Percy Thomas Partnership, under the guidance of its director, architect Jonathan Adams, the first phase of the building is still under construction, with the auditorium being fitted out at the moment. Adams, formerly of Alsop Architects, who moved back to south Wales to get an easier commute,

picked me up in his unpretentious Fiat and showed me around.

We approached along the rear elevation, a large proportion of which will disappear from public view when the final wing of the building – housing the Academi, Urdd Gobaith Cymru and Ty Cerdd and other national organisations – is completed. Adjacent to the WMC, the new Welsh Assembly building, designed by Richard Rogers, is emerging from the ground, while a number of unprepossessing – some might say downright ugly –

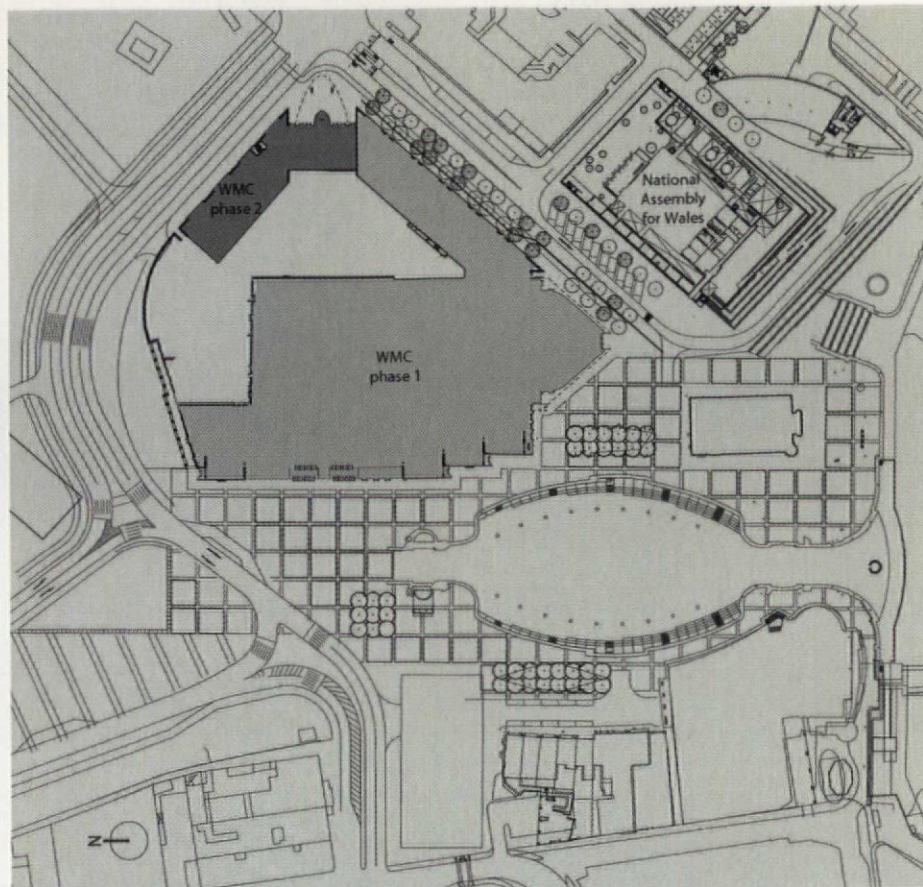
The architect's account
If I try now to think of things that I might have done differently I find myself dwelling on the many unavoidable compromises that are a feature of all projects but greatly more so of large public projects like this.

In reality, with a complex network of funders and a constantly fluctuating client body, one's control was so tenuous that any attempt to be more forceful or make ultimatums in order to hang on to a particular idea would only undermine the relationships that were the basis of the influence one could exercise in the first place.

The perception of risk seems to be everything, and it seems to be a widely held view – and one which it is convenient to the rest of the construction industry to endorse – that it is the architect alone who exacerbates risk rather than mitigates it.

I am not sure how I would go about it, but if another opportunity of this kind presents itself in the future I would focus on one important lesson: the quality of the trust that you build at the beginning is directly proportional to the quality of the building you make at the end.

J G Adams



Waste slate has been used to good effect

buildings, such as the temporary home of the Welsh Assembly, border the site.

Slate layers

The goods service yard is built up of slate walls supported on a steel framework like a Hollywood set. Adams is undecided whether to leave this in the finished building. The slate is supported on angles spanning from massive steel columns. Thus, in this revealed section, it offers up the secret of how the slate seems to float across the main building and can incorporate large strips of glass. Along the main elevations, the structural concrete has been fitted with steel flats at the toe (the heads of openings) to carry the slate skin.

As a cost saving, Adams decided to source waste slate from the Pehrryn quarry in Bethesda in north Wales, which has various shades, grains and colours, from black to purple. These have been laid in unequal and tapering layers to reflect the natural stratification of the material as found. Whether this emphasises some kind of 'Welshness' – one of the brief requirements – or whether it is just an excellent use of a spoil heap material, is open for debate, but the strength, durability and availability of a waste material, currently at £37/tonne will undoubtedly mean that Adams' idea will catch on. In some areas, the waste material lay in piles ready for site clearance.

The scale of the walls close up is certainly mountainous and very tactile. The red brick used on the rear of the building combines well with the wane-edged Sitker Spruce boarding, reminiscent of suburban fencing, which will weather to silver. Around the site are constantly referenced sample panels of

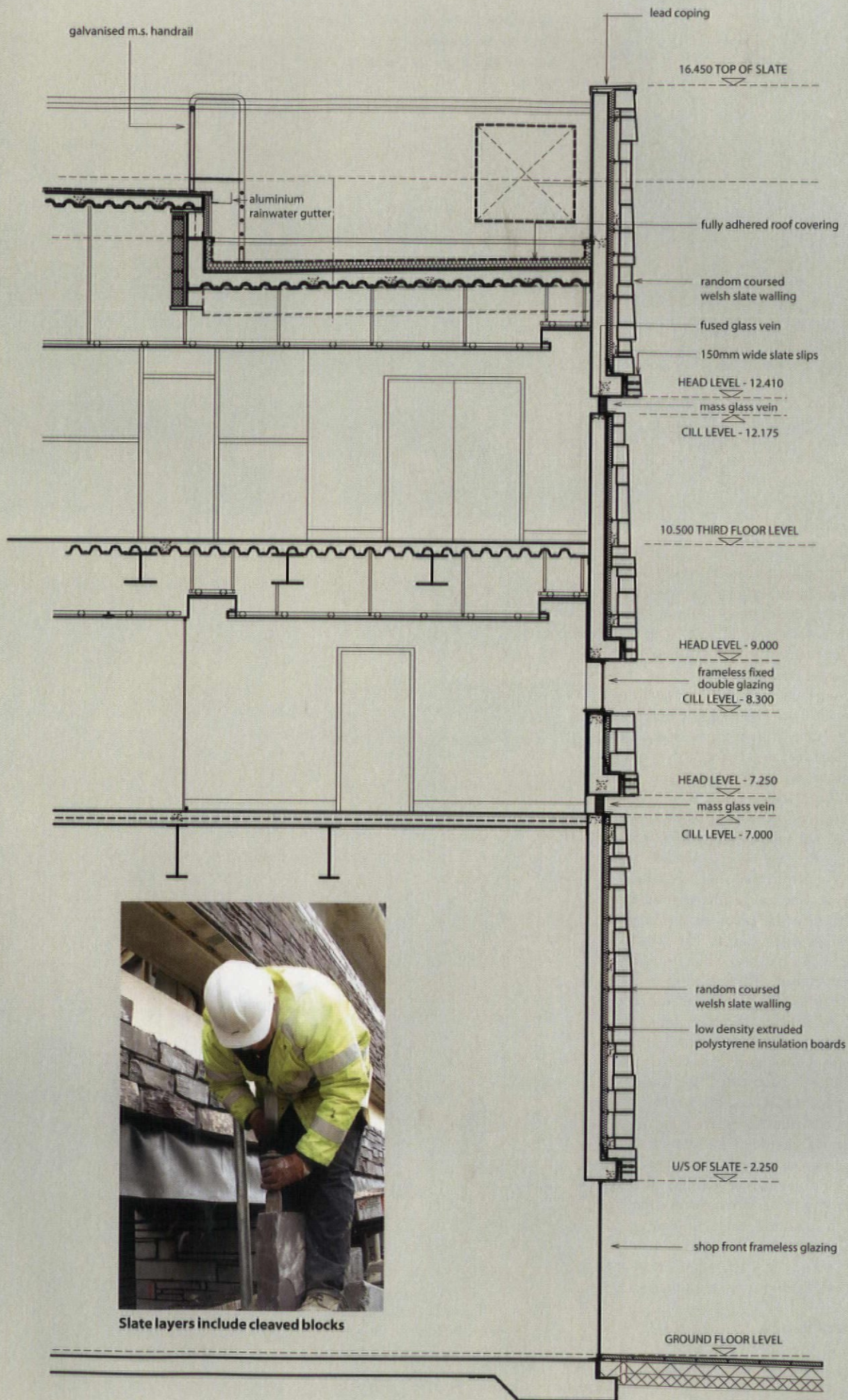
brickwork, slate, concrete, etc and generally the site was well-ordered and the workmanship very good.

As we move around to the front elevation, the looming form of the roof/canopy comes into view. Adams takes over the story: 'The original recommendation of Avesta Polarit (the stainless steel manufacturer) was to use high-molybdenum grade material to avoid risk of corrosion due to the salty maritime air.

'It was after they suggested the high-molybdenum specification that we started to look at the patina treatment to get the colour, and made the choice to go for a matt finish to the sheets in order to make them less reflective and to 'introduce them' to the weathering process.

'An accelerated corrosion chemical trial was carried out by Avesta Polarit Metallurgical Development and it concluded that high molybdenum was not essential and that normal levels of molybdenum in the 316 L product grade were sufficient to deal with the marine environment. The light buffing that was needed to provide the matt appearance actually repaired the micro surface of the stainless steel.' Some early trial panels had oxidised to black almost overnight and Adams is still excited by the prospect that the cladding has an unknown quality to it, which might affect its appearance in the long term. But treating the surface with the Rimex 'Colourtex' process has added further protection.

Each panel reveals its fixings pattern and after a great deal of investigation into the issues of crevice corrosion it was resolved to leave the joints expressed between panels, relying on the weatherproofing below. The overall effect is supposed to allude to a seam

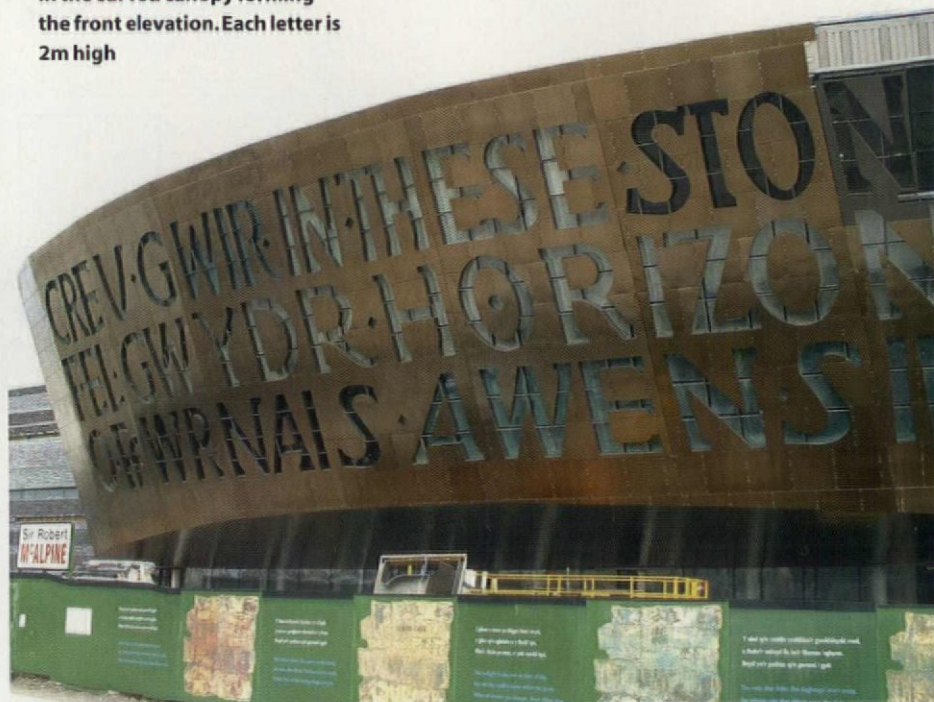


The poet's account

The inscription on the front elevation is the result of a competition inviting poems to best promote the building: a competition that had received entries such as: 'Welcome to the Welsh Millennium Centre.' Fortunately poetry won out and the inscription, or engraved poem reads 'Creu Gwir Fel Gwydr O Ffwrnais Awen/In These Stones Horizons Sing.' The Welsh portion of this bi-lingual poem translates as 'Creating Truth Like Glass from the Furnace of Inspiration.'

Renowned poet, Gwyneth Lewis says of her work: 'The copper dome of the building reminded me of the furnaces of Wales's industrial heritage. I wanted to link that to medieval Welsh tradition, and Ceridwen's cauldron, from which the poet Taliesin received his inspiration. "Awen" suggests both poetic inspiration and the general creative vision by which people and societies form their aspirations. The stones inside the building will literally be singing once it is open, and I wanted to convey the sense of international space created by the art of music.'

The bi-lingual glass inscription in the curved canopy forming the front elevation. Each letter is 2m high



of rivets along a blast furnace – tying in with the subject of the elevational poem (see box).

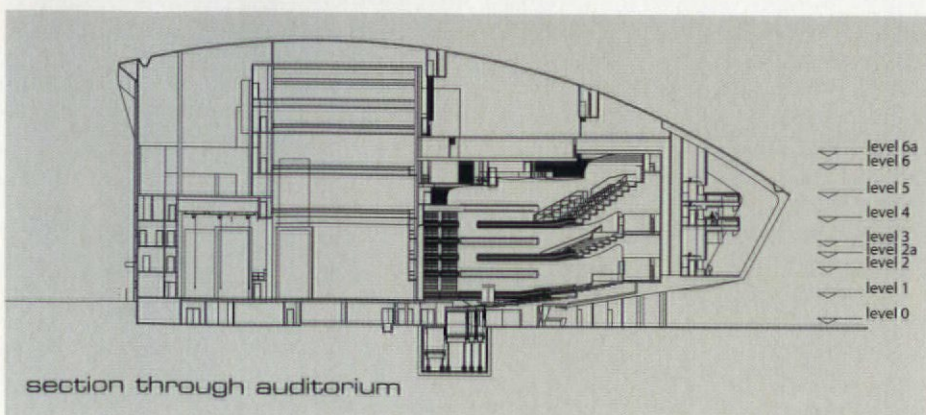
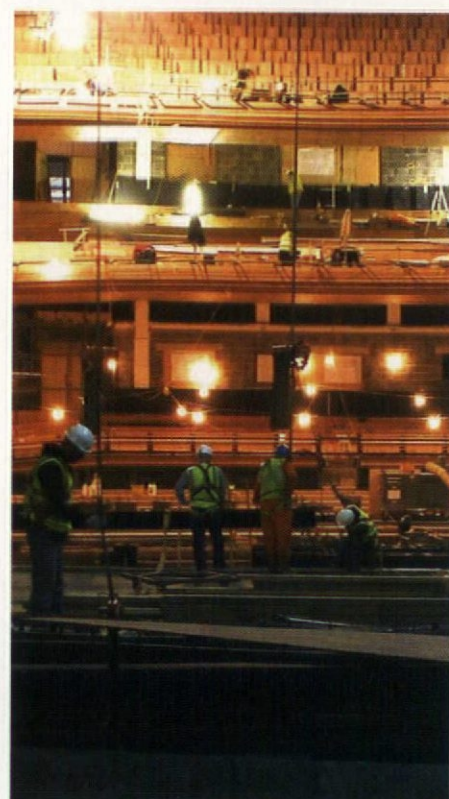
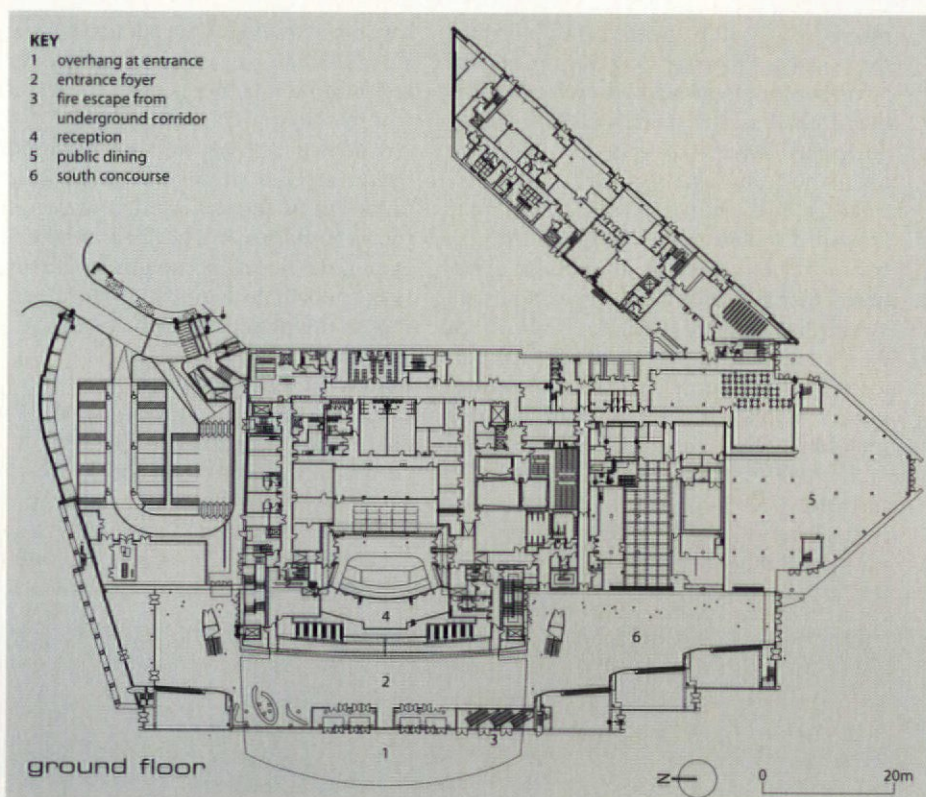
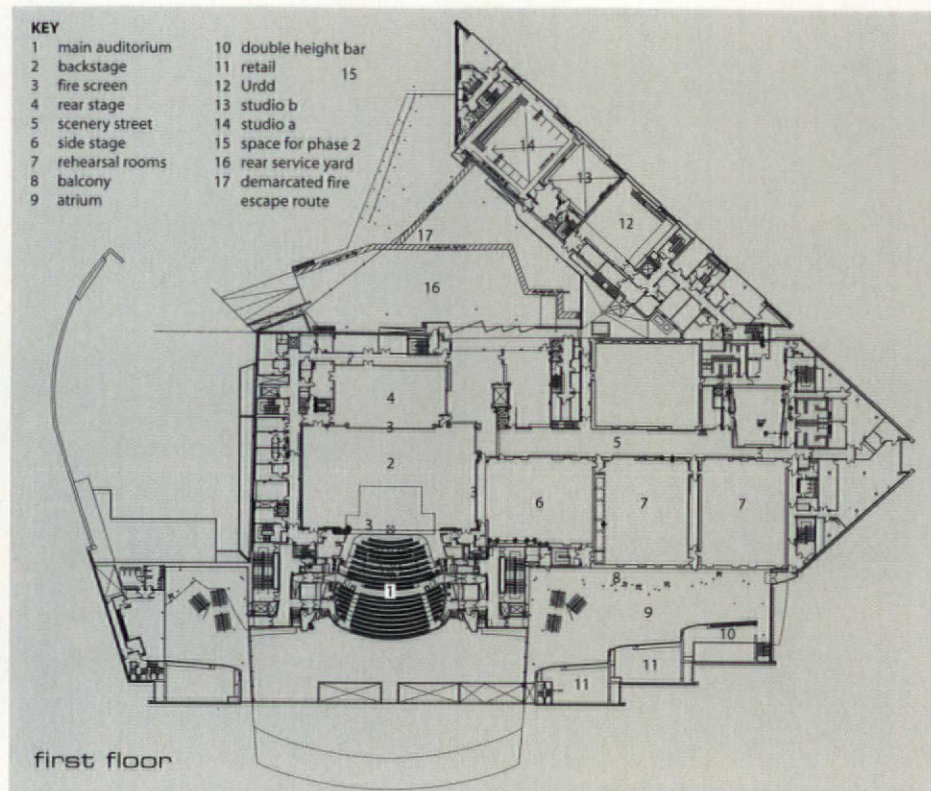
The canopy itself curves around with its elevational face at an angle so that to transcribe the poem onto the wall required careful computer-generated templates that curved and distorted the letters and phrases in two dimensions so they ended up as horizontal text on the three-dimensional facade. The structure itself had to be modified to ensure no vertical support occurred within the space designated for a 'letter.' The glass for the 2m high lettering is not cut to shape, but comprises double-glazed units that have been masked out by the GRP outer skin and GRG (glass reinforced gypsum) inner skin. Gasketting at the glass/wall junction facilitates differential movement and avoids anyone suspecting that the glass is not letter-shaped. The glass inset into these letters has been tinted, in bands, from blue to copper casting even more interesting light into the mezzanine restaurant areas. Adams anticipates people looking up and being intrigued enough to come in.

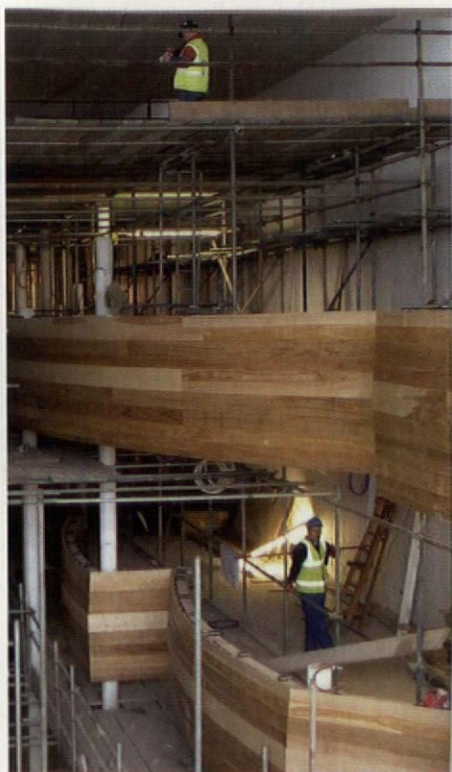
Other novel glass panels have been created, and subsequently patented, at Swansea Institute's Architectural Glass department. This 150mm thick sculptural glass is formed of glass bricks each made by fusing blown glass layers together to create translucent veins, which provide an eerie striated light through the building to the external environment at night. When I pointed out that the contractors had been careless in dribbling of paint or whitewash along the glass, Adams reassured me that it was 'artistic' manifestation.

Grand entrance

The soffit of the entrance canopy is shaped into what senior technologist Mike Dacey calls a 'smile on the outside, turning into a frown on the inside'. There is no symbolic







The sweeping balustrades being clad in horizontal hardwood planks display great variety in colour and texture. Inside the centre is a hive of activity

meaning intended, it is just that the project team found this the most useful way of conveying the geometry to the fabricators. The soffit is convex on the outside, flattening out to a horizontal at the glass entrance wall – the interface between inside and out – and gradually opening out as a concave internal soffit. This complexity, added to by the fact that the soffit is on a rake, has been framed out from the relatively straightforward cantilevering steelwork. Adams has been quoted as saying, 'the reason some architects cleave to the obvious fallacy that less is more is because it is usually easier not to do something than it is to think of a meaningful way to do it.'

At the external wall, three pits currently demarcate the vertical means of escape stairs which rise up into the building envelope. Because of the openness of the foyer area, escape from the auditorium and function

rooms, etc has to be by means of protected shafts across this space. So, since the site was being partially excavated it was decided that the internal escape stairs would be carried down to a 'basement' level, run under the main foyer concourse and rise up within the curtilage of the building behind 60-minute firewalled lobbies, for final egress through emergency escape doors at the front elevation. This has been worked out as part of an overall fire strategy which will include an on-site Fire Marshall, a full detection, monitoring, voice alarm and smoke control system combined with a main building sprinkler system (the concourse is in excess of the 4,000m² recommended in Part B3 for sprinklers), although as a result of a fire risk strategy review, the compartment size has not been limited to the extent required by the Approved Documents. Disabled visitors

have been provided with landing refuges and all wheelchair positions in the auditorium are within single means of escape travel distance to external conditions.

The rear delivery yard has been marked out in a series of angular paths which, it turns out, is the demarcated fire assembly route should the yard be filled with lorries. If vacant, the fleeing occupants would do well to shortcut to the boundary wall, rather than stick to this directional bureaucracy.

Work in progress

The works are being carried out under a standard Design Build Contract (JCT with Contractors' Design [amended]) with Percy Thomas Partnership novated to provide detailed information. Currently, a team of about six are housed in cabins, which will have to be moved to allow a start on phase two.

Acoustic engineer's account

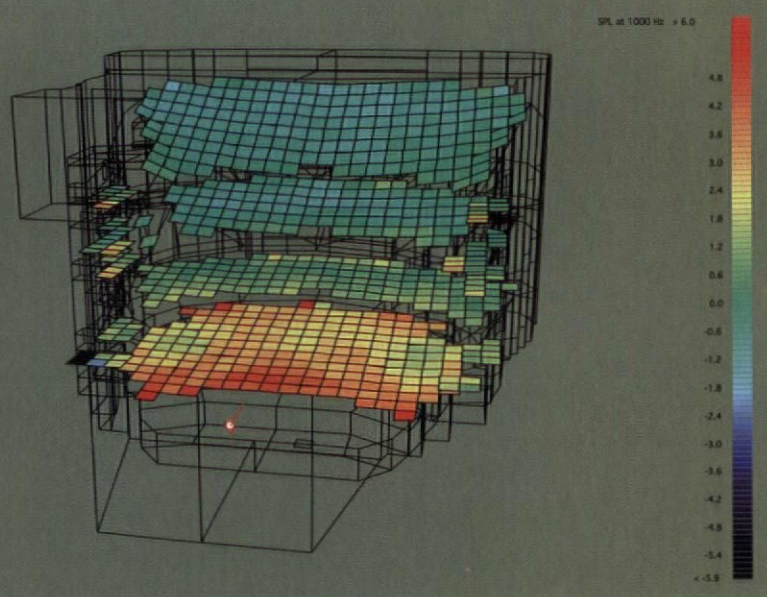
The main theatre has been designed with a programmable variable acoustics system, enabling the acoustic of the theatre to be adjusted to suit the performance.

Particular attention has been given to prevent noise disturbing the audience's enjoyment. Expenditure has been balanced between excluding external noise (the main theatre is 'inboard' in the building plan), isolating the parallel musical activities that will fill the building with life (using box-in-box isolated rooms as necessary) and carefully controlling building services noise.

Both advanced computer simulations and an acoustic scale model were used to assist the design of the main theatre and we were able to listen to the acoustic predictions of the computer model. This technique is known as auralisation. It enabled, for example, assessment of the effect that a lighting bridge would have on the sound of the flute trill played in the orchestra pit.

The public areas have a controlled but not over-controlled acoustic, such that the ambience is lively without being noisy.

Rob Harris, Arup Acoustics





The centre looks out on a desolate reclaimed dock. The dull landscaping includes a stepped 'seating area' for outdoor public performances

Internally, the place was an ordered hive of activity, with the ceilings being fitted, electricians taking them down again, plasterers touching up and painters listening to the radio. The sweeping balustrades being clad in horizontal hardwood planks – more striated layers – display great variety in colour and texture. As the contractor moves on, unfortunately the workforce has been dropping scaffold poles from a great height directly onto the terrazzo flooring, making great pitted holes which will be difficult to patch up.

The huge public atria spaces lead into the 1,900-seat horseshoe auditorium that has been engineered to give the best operatic acoustic possible while at the same time catering for amplified music (*see box*). The walls are fitted with applied GRG stone-pattern tiles, in a not-very-appealing through-colour red, I have to say, that are angled to

maximise or minimise resonant frequencies. Backstage, the fly tower is huge – apparently the entire New Theatre Cardiff can be fitted onto the stage area – and the service yard and internal street rises to 15m, serving the auditorium and all rehearsal rooms.

Around the building, there were certainly a few problems. For example, the standardisation of laminate doors in the office areas had led to some uncomfortably inadequate over-door panel details; the naff external light fittings to the rear yard; and the timber seemed a bit overdone internally (cherry, walnut and American oak), but these are minor niggles. My biggest problem with the building was its setting, looking out over a desolate reclaimed dock that had been landscaped in the most anodyne way possible as enabling works to some future scheme – any future scheme. It is kitted out with the obligatory

water feature, stepped 'seating area' for public performances/sandwich eating; monstrous lighting columns and a sea of paviers. Hopefully, the promise of outdoor concerts might liven this depressing regenerative desert.

However, after my visit, I found the building had grown on me. The built-in maintenance-free ethos was well handled – Adams is certainly an astute designer with an eye for economy as well as a desire for quality, able to explain his design in no-nonsense prose. Now, the project team is awaiting funding for the completion of the final wing that will be the symmetrical closure to the rear yard. If you want to help, for £500 you can sponsor a main auditorium chair, designed and built near Parma, Italy. If you are not that flush, why not adopt a slate for £75? On the other hand, for a few quid less, you can get to see Max Boyce!

CREDITS

START ON SITE

February 2002

COMPLETION ON SITE

November 2004

GROSS EXTERNAL FLOOR AREA

38,500m²

CONTRACT

JCT WCD 98 with amendments

BUILD COST

£74 million

CAD PACKAGES USED

Bentley MicroStation

CLIENT

Wales Millennium Centre

ARCHITECT

Percy Thomas Architects: Jonathan Adams, lead architect; Rob Firman, project director; Patrick Myall, architect; Lee Griffiths, architect; David Wilcock, architect; Geoffrey Sillitoe, assistant; Katia Fotiadou, assistant; Keith Vince, senior technician; Mike Dacey, senior

technician; Tony Daley, technician; Matt Thomas, technician

QUANTITY SURVEYOR

Clarus PCM

STRUCTURAL ENGINEER

Arup

SERVICES ENGINEER

Arup

THEATRE CONSULTANT

Carr and Angier

ACOUSTIC CONSULTANT

Arup Acoustics

MAIN CONTRACTOR

Robert McAlpine

SUBCONTRACTORS AND SUPPLIERS

Concrete structure Laing O'Rourke Civil Engineering; steel structure Watson Steel Structures; secondary steelwork Structural Systems; mechanical and electrical N G Bailey & Co; drywall and plastering GHT Plastering Services; decorating (labour and materials) Classic Builders &

Decorators (Cardiff); metal roof Kelsey Roofing Industries; stainless steel rainscreen Avesta Polarit; stainless steel finishes Rimex Metals; standing seam and special fixings Kalzip; slate walling GH James; slate masonry Irvine Whitlock; slate quarries Alfred McAlpine Slate, Wincilate; fused glass features (labour and materials) Innovative Glass Products; external glazing Aluminium Sashes; curtain wall system Kawneer; bricks Ibstock; brick construction Irvine Whitlock; picture frame windows (labour and materials) MD Fabrications; inscription window GRP and GRG work Gillespie UK; auditorium GRG lining (labour and materials) Hodkin & Jones (Sheffield); specialist auditorium joinery A Edmonds & Co; general auditorium joinery Houston Cox Carpentry; handrail and balustrades Fabrenco; stage machinery Waagner Biro UK

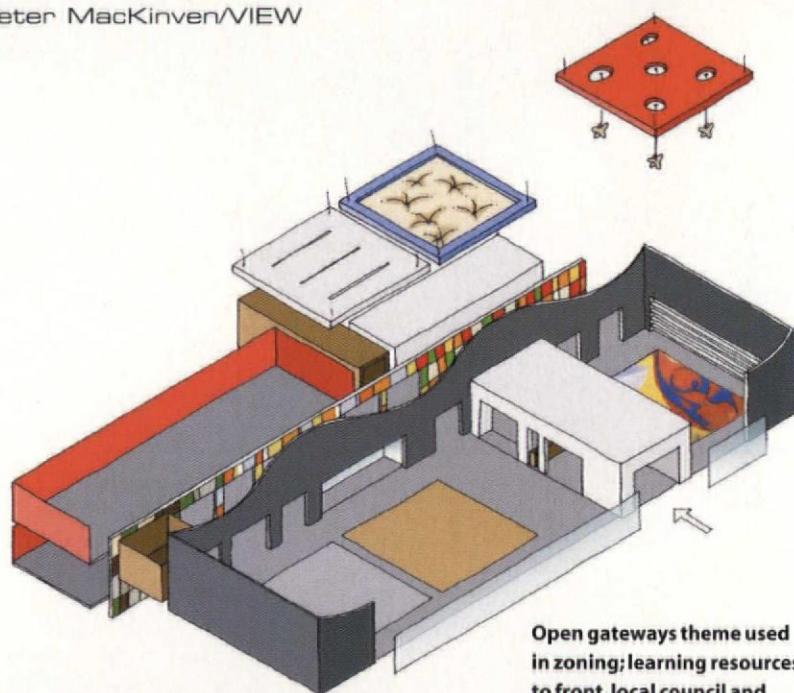
Stage Systems; main auditorium seating Deko



Opening The Gate

FaulknerBrowns' The Gate in east London is a sign of changing times, combining learning resources, local council services and a community venue

By Barrie Evans. Photographs by Peter MacKinnon/VIEW



Open gateways theme used in zoning; learning resources to front, local council and community spaces behind

For a relatively small building of 1100m², The Gate is trying to do a lot. So-called as a sign of its intended central role in Forest Gate, it is well-located as a community resource on a high street (Woodgrange Road).

Its presence is intended as a sign of regeneration. In it, FaulknerBrowns has had to weave together, not merely accommodate, the three main uses of the building. For most of its floorspace it is a learning resource centre, a better descriptor than library, reflecting that many customers' priorities are other than borrowing books to read, and that local authority Newham is committed to lifelong learning.

Resources do include books, of course, but there are also DVDs, free internet access, storytelling for children and more. The building is also a local outreach office for the local authority, providing a dedicated area for meeting council staff (with the risk of

occasional confrontation, a hard one for the architect to manage). Not least, there are rooms that community groups can use. It is a redefinition of the community centre. (You can imagine other services added on a larger site, such as health.)

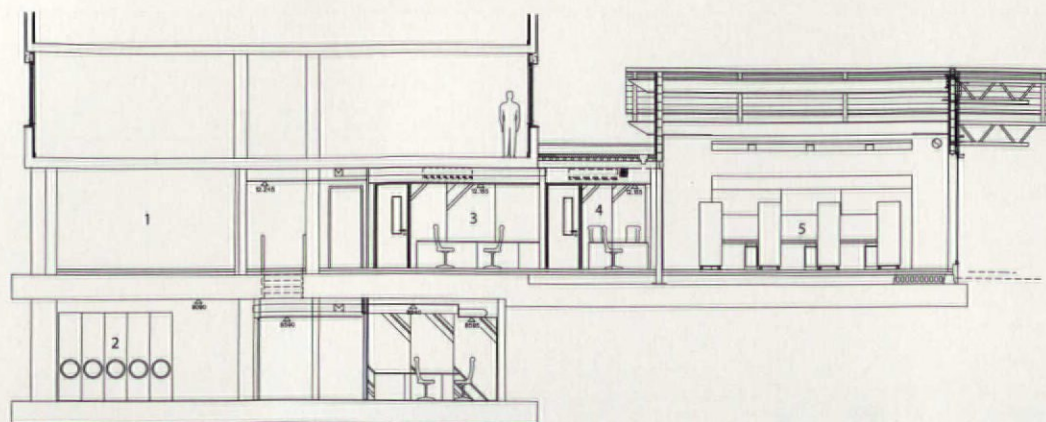
The original building fabric that FaulknerBrowns took on was far from ideal. The Gate is converted from retail units plus the adjoining ground floor and basement of the 1960s block behind. This block was a telephone exchange, with low ceilings, the upper floors intended for conversion by others to key-worker housing. (This project includes a new small extension to the rear.) The retail units are not great architecture but their waved roof does give them presence on the street.

FaulknerBrowns has glazed the street front to read as one building. A tree-image film applied to the glass helps with this, and

is varied in image density to give greater privacy to the right of the entrance, which is the children's space.

One implication of mixing functions and enabling people to wander through the building is the concentration of security at the entrance. This works both as screening for book theft and as a reception desk. It may inhibit a few who are hesitant about crossing the threshold, the open arrangement of the remainder makes entrance more than worthwhile.

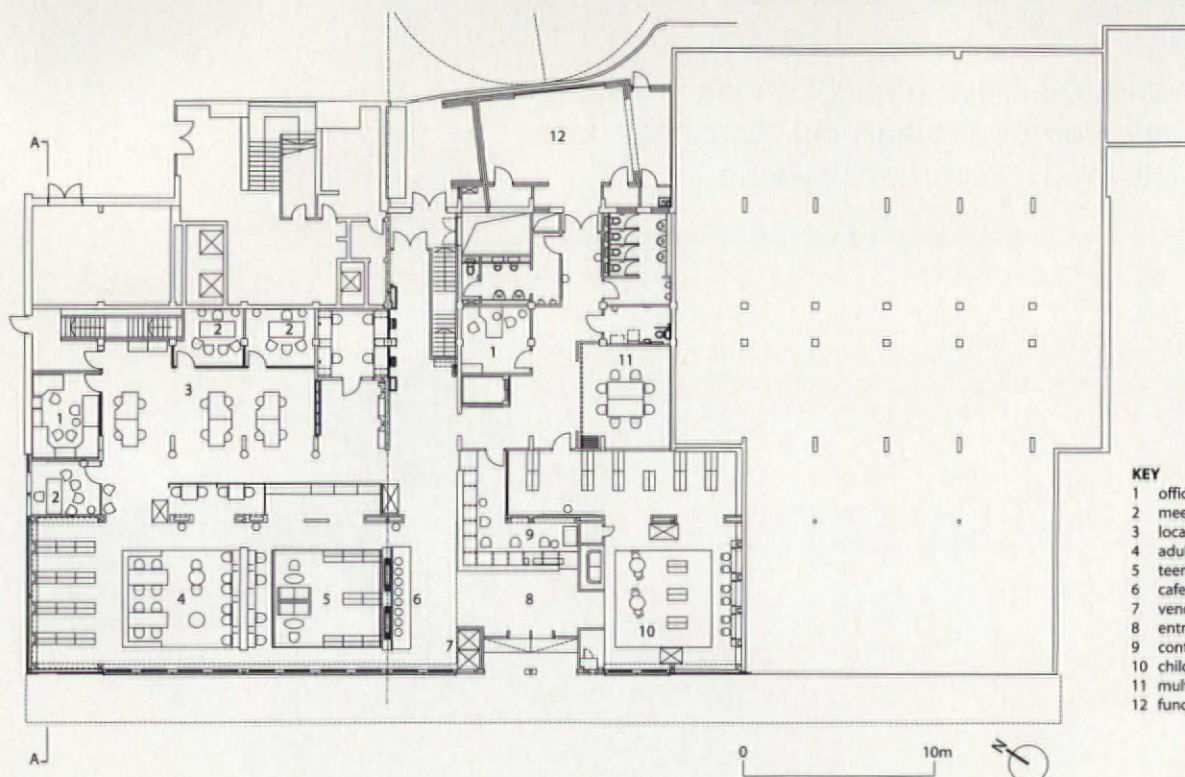
The entrance leads directly to the enclosed children's area, providing both security and a degree of acoustic separation for other building users. The architect's acoustic zoning is to move from the noisiest in the south (children) through the entrance, cafe area, teenage zone and, lastly, the adult zone at the north end. Generally,



section aa

KEY

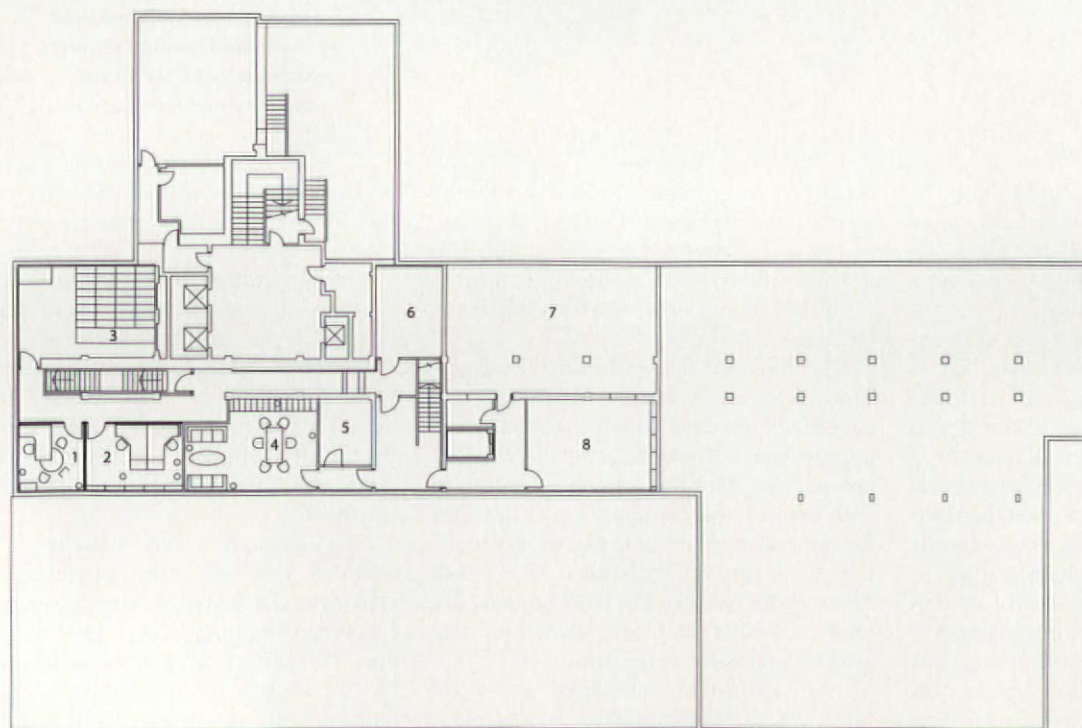
- 1 residential
- 2 storage
- 3 office
- 4 meeting room
- 5 adult zone



ground floor plan

KEY

- 1 office
- 2 meeting room
- 3 local service centre
- 4 adult zone
- 5 teenage zone
- 6 cafe
- 7 vending
- 8 entrance
- 9 control
- 10 childrens zone
- 11 multi-purpose
- 12 function room



lower floor plan

KEY

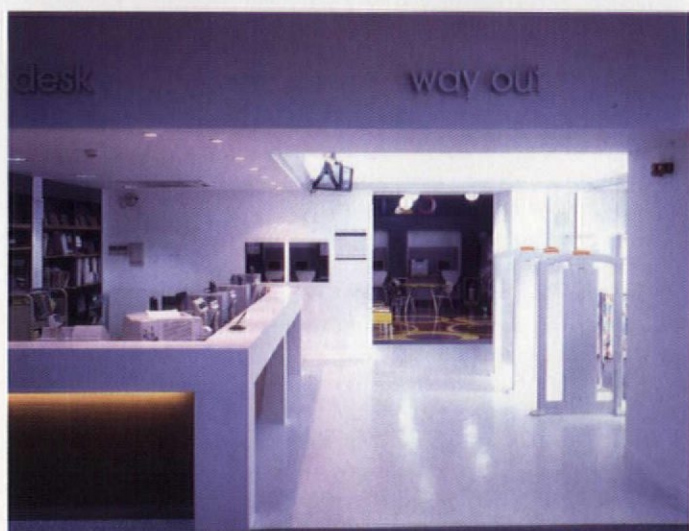
- 1 office
- 2 workroom
- 3 storage
- 4 staff rest room
- 5 kitchen
- 6 comms room
- 7 plant room
- 8 store room



Surface acts as a (hopefully temporary) coffee bar fronting the teenage zone. The IT zone (desk and computers) separates the adult zone beyond



The wavy roof that the architect inherited is at least a high street landmark. Window graphics connect areas either side of the entrance



Route through to the community spaces. Right: entrance security barriers with glimpse of children's zone (see also page 38)



Circulation space where the wavy roofed area (to right) meets the lower-ceilinged base of tower (to left) which accommodates local council services. Nearest services bay closed with folding glass screen

this works well. The cafe area is small and currently served only by vending machines, although it is hoped that a servery will be introduced at some time in the future.

But even at this scale its very existence and positioning help to instil a tone of informality and welcome to the building. So it is perhaps not surprising that when I was there the teenage and adult spaces were not age-segregated as in the plan – people were mixing freely and chatting quietly. It was neither the buzz of the street nor the frozen quiet of the studious book library.

This informality spills over to Newham's services centre, making it more approachable and any queueing less regimented. The screen wall required between learning resources and council services is clear glass. The wall-opening that frames the council services is painted in the colours of the foods from this multi-cultural community – tomatoes, basil, turmeric and so on: something light-hearted before the rent discussion.

Natural ventilation was not realistic with this deep volume. There are exposed ventilation ducts across the ceiling but they are made less prominent by coloured areas of drop ceilings, which help define the zones and lessen

the apparent effect of the overall restricted floor-to-floor heights. Rooflights at the rear of the ex-retail space also reduce the sense of enclosure. For flexibility, there is cabling throughout, using a very shallow punched-metal system adopted for historic buildings.

FaulknerBrowns is best known for its leisure schemes but also has experience of university learning resource buildings and retail design, among others. That feel of 'destination' buildings, and the approach to the user as customer that comes from them, are evident here. The self-checking system for loans is akin to some supermarkets, with staff freed from their checkout desks to wander, offering help to customers.

Given the buildings the project started with, this was never going to be bijou architecture – but nor should it be, for this would distance it from its constituency. It needs to feel it belongs on this street. As one of the architect's smaller buildings, it is nevertheless a significant pioneering of community building. The community likes it too. Compared with the previous library, there has been an 800 per cent increase in visits, a 600 per cent increase in media issues and a significant lengthening of periods of stay.

Cost summary

Data based on tender sum, for gross internal area

	Cost per m ² (£)	Percentage of total
SUBSTRUCTURE	79.96	6.14
SUPERSTRUCTURE		
Frame	20.73	1.59
Roof	10.56	0.81
Rooflights	7.99	0.61
External walls	58.05	4.46
External doors	13.82	1.06
Internal walls and partitions	70.11	5.38
Internal doors	14.93	1.15
Group element total	196.20	15.07
INTERNAL FINISHES		
Wall finishes	50.63	3.89
Floor finishes	90.67	6.96
Ceiling finishes	93.23	7.16
Group element total	234.53	18.01
FITTINGS AND FURNITURE	97.54	7.49
SERVICES		
Sanitary appliances	17.38	1.33
Space heating and air treatment	292.96	22.50
Electrical services	225.13	17.29
Lift installations	14.65	1.13
Builders' work in connection	26.60	2.04
Group element total	576.72	44.29
EXTERNAL WORKS	21.55	1.65
PRELIMINARIES/INSURANCE	95.65	7.35
TOTAL	1,302.14	100

Cost data provided by Peter Burns, Gleeds

CREDITS

TENDER DATE

May 2002

START ON SITE DATE

September 2002

CONTRACT DURATION

Seven months

GROSS INTERNAL AREA

1,100m²

PROCUREMENT

Traditional contract

TOTAL COST

£1.5 million

CLIENT

Leisure and Cultural Services, London Borough of Newham

ARCHITECT

FaulknerBrowns: Steve Dickson, Nigel Scorer, Peter Holgate, Chris Howliston, Gary Hodgson, Andrea Gaines, Craig Peel

MAIN CONTRACTOR

Mansell Construction Services

SERVICES, STRUCTURAL ENGINEER

Cundall Johnston and Partners

QUANTITY SURVEYOR

Gleeds

SUBCONTRACTORS AND SUPPLIERS

Glazing Pilkington; specialist glazing Creative Glass and Mirrors; rooflights Vitral; floor coverings Interface Europe; specialist joinery Newman Scott; glass partitions Neslo; doors John Porter; ironmongery Allgoods; sanitaryware Duravit; furniture Office Image Interiors; lighting iGuzzini

WEBLINKS

London Borough of Newham

www.newham.gov.uk

FaulknerBrowns

www.faulknerbrowns.co.uk

Mansell Construction Services

www.mansell.plc.uk

Cundall Johnston and Partners

www.cjp.co.uk

Gleeds

www.gleeds.co.uk

Trimming the VAT

There may be tax relief on certain building types but which bits of the building actually qualify for zero-rating?

BY NEIL OWEN

There is a common misapprehension, often held by the owners of listed properties, and in particular listed dwellings, that all work carried out on their property is eligible for zero-rating. The good news is that work to listed buildings can be zero-rated but a number of conditions must be fulfilled.

What are the conditions?

- The building must be, or intended to be, used either as a 'dwelling' or for a 'relevant residential' or 'relevant charitable' purpose;
- the building work requires and receives listed building consent in order to be carried out; and
- the work consists of an alteration to the fabric of the building.

What buildings qualify?

The definition of a dwelling is relatively straightforward, although it is important that it must be self-contained and independently saleable.

A building is deemed to be used for a 'relevant residential' purpose, where it is:

- a children's home;
- a home for the care of those requiring it by reason of old age, disability, alcohol or drug dependency, or mental disorder;
- a hospice;
- a residential accommodation for students or schoolchildren;
- a residential accommodation for the armed forces;
- a monastery, nunnery or similar; or
- an institution which is the sole or main residence of at least 90 per cent of its residents.

A building for a 'relevant charitable' purpose qualifies where it is used:

- by a charity otherwise than in the course or furtherance of business; or
- by a charity as a village hall or similarly in providing social or recreational facilities for the local community.

What residential buildings do not qualify?

A building will not qualify if it is a hospital, prison or similar institution, or a hotel, inn or similar establishment.

Defining an 'alteration to the fabric' of the building

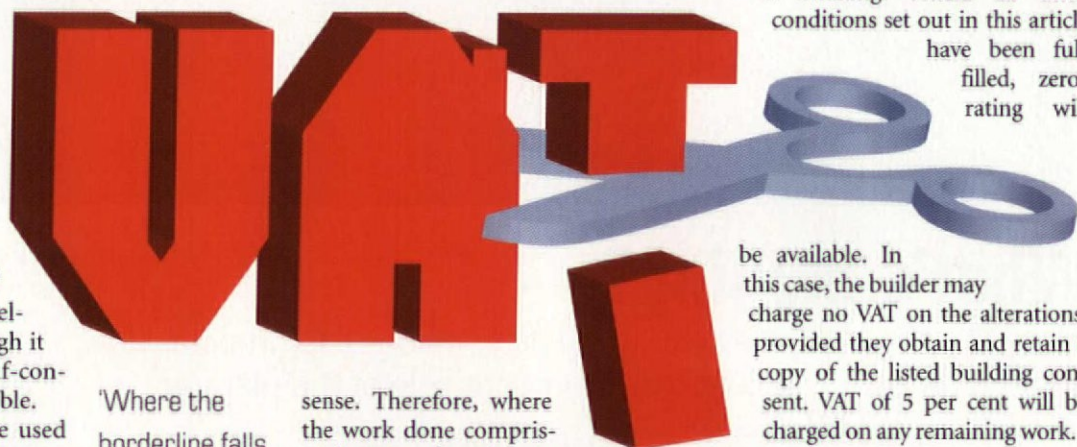
It is this condition which trips up many owners of protected buildings. Listed building consent may be required for many works, which do not amount to alterations in this

more inclined to accept an apportionment without question, where it has been sensibly carried out in advance.

Is repair and maintenance always 'vatable' at 17.5%?

No. There are now circumstances where the 'vatable' element of work to a listed dwelling is rateable at 5 per cent, rather than 17.5 per cent. If any part of a reduced-rated project qualifies for zero-rating under the provisions described in this article, that element may be zero-rated, leaving the rest of the project subject to VAT at 5 per cent. For an explanation of how the reduced rate applies to construction services, see the article 'Avoiding VAT adds value' (AJ 18.9.03).

An example of this would be the conversion of a listed barn to a dwelling. Where all three conditions set out in this article have been fulfilled, zero-rating will



be available. In this case, the builder may charge no VAT on the alterations, provided they obtain and retain a copy of the listed building consent. VAT of 5 per cent will be charged on any remaining work.

'Where the borderline falls between alterations and repair/maintenance, is, by and large, a matter of sensible judgement'

sense. Therefore, where the work done comprises, in part, alterations to the building and, in part, repair and maintenance, it is necessary for the builder to apportion the value of the work done, zero-rating the alterations and charging VAT on the repair and maintenance.

Where any repairs or maintenance are merely the consequence of alteration works, such as making good, they may be treated as a necessary part of the alterations and zero-rated accordingly. Conversely, if an alteration is a mere by-product of works, which are essentially in the nature of repair and/or maintenance, it will not be eligible for zero-rating.

There is some discussion as to where the borderline falls between alterations and repair/maintenance, and this has been the subject of a number of tribunal cases. By and large, it is a matter of sensible judgement. What is quite clear is that Customs is far

Apportioning costs

In cases where skirting boards have been replaced throughout a listed building, for example, and where one room has them installed for the first time, the fixing of the skirting boards in that one room constitutes an alteration, whereas the remaining skirting boards are treated as repair and maintenance.

Some costs are neither repairs nor alterations, such as supervisory work done by the contractor's staff. Proportions have to be worked out. For example, if the value of alteration is, say, £10,000 and the value of repairs is £5,000, the other costs could be worked out as two thirds/one third to the zero-rated and standard-rated costs of the overall contract.

Neil Owen is a VAT specialist at Langdowns DFK. For further information, contact 023 8061 3000



What's my line?

In our continuing series exploring professions that impact on architects, we look at the important role of the planner

BY AUSTIN WILLIAMS

David Beardmore is a planner – the ultimate pantomime villain to many architects. However, in his defence, Beardmore is not one of 'those' planners – the ones that tell you to go away and redesign your building more in keeping with the surroundings – he is a proper planner. He left the public sector 20 years ago. A bit of a poacher turned gamekeeper.

Beardmore describes himself as one of a dying breed; someone who went straight from school into the local authority planning office. He had wanted to be a surveyor because he wanted to work in the fresh air, but when he applied he found out that there were only vacancies for planners. 'So, I thought: OK,' he says.

When I ask him to explain the important role that planners fulfil, he tells me, after asking me not to laugh, that they are there to help save the

David Beardmore has been involved in the urban conservation of Bath for a long time but is exasperated that many local authority planners get carried away 'protecting the public interest'

environment and to improve people's lives. Actually, when he says it, it does not sound as pretentious as it looks on paper.

Too many local authority planners see their role as protecting the public interest and get carried away with themselves when giving their rulings on delegated matters or when making their case to council. If they want to pontificate about the 'common good' they should be elected into council chamber and stop being a planner. 'Public interest,' he says, 'is set by governments and the democratic process and not by town planners.' By implication, he suggests that they should just get on with doing their job – to the best of their ability – to represent the planning system rather than the benefits of an area, community or whatever.

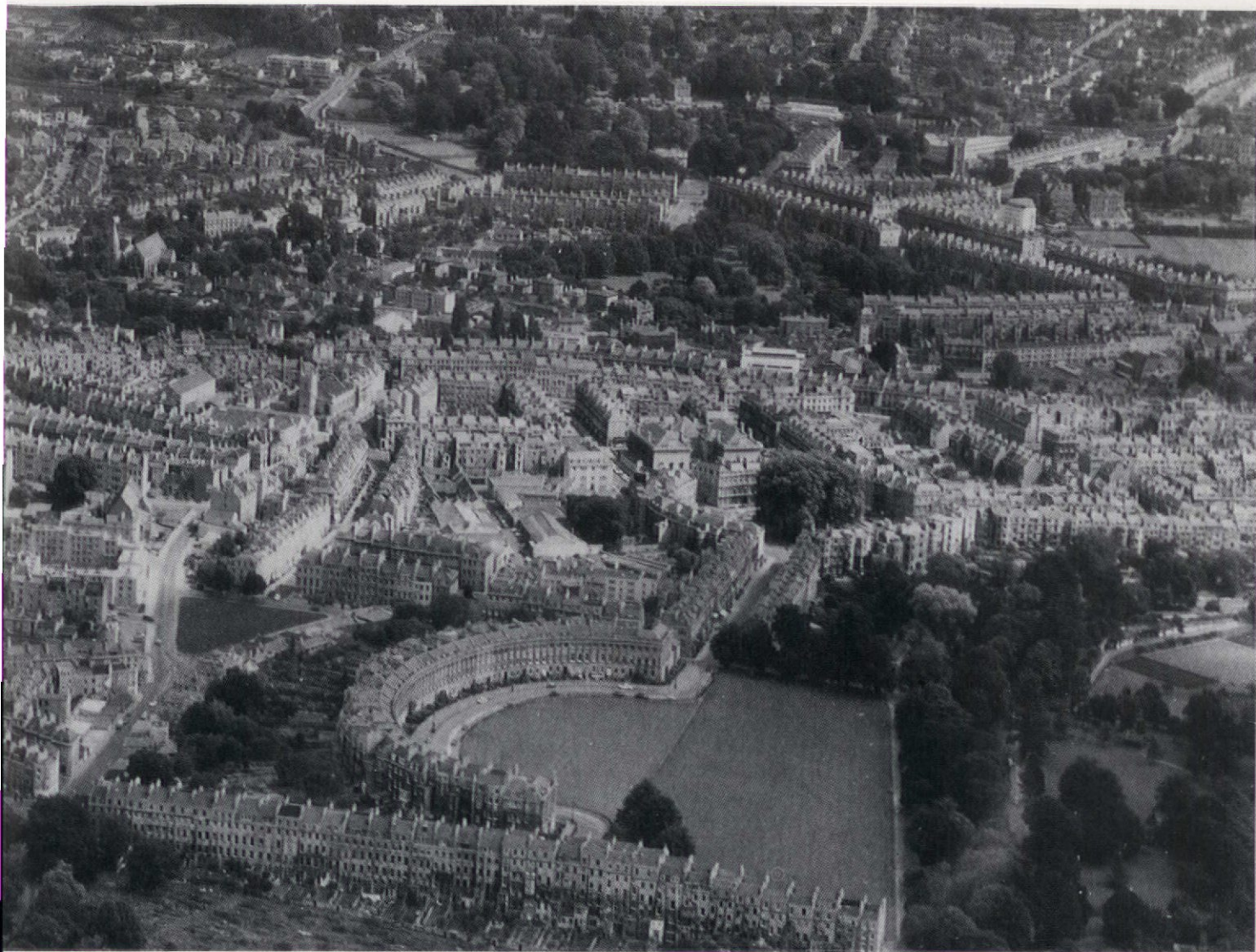
'I've studied planning, I know the

rules,' he says, but as for pontificating about local affairs: 'Who elected me?' he asks.

However, that still does not stop him from commenting on the merits and performance of the elected leaders and the sometimes blind adherence to planning rules and rigid compliance with regional and local development plans.

Beardmore relates a case in Bath that seems to have been rumbling on for some time and has got his goat. It involves a derelict site owned by the infamous Robert Maxwell, which has been earmarked for regeneration for the past 20 years. He suggests that one person in the committee has exercised persuasive influence to halt progress on it 'for no good reason' other than it seems to be earmarked for 'industrial development'. With the concept of British industrialism fading into the dim mists of memory, and hence the notion that it might need a dedicated location becoming untenable, Beardmore is exasperated: 'Enough is enough.'

The Heron Tower inquiry has been much pilloried but he thinks that – as an example of a democratic, thought-



ful consideration of a tall building – English Heritage's view that another will detract from St Paul's and scar the city skyline is a perfectly fair argument and 'doesn't deserve the scorn poured on it by Ken Livingstone'. Architecture needs to be argued for. It is this dynamic relationship where Beardmore situates the role of planner and architect. Instead of it being some kind of passive expression of mutual respect and Eganite harmony, Beardmore seems to want a more aggressive cohabitation. He aims to provide a balanced view but is no shrinking violet in making his opinions known.

Beardmore is barely constrained in his contempt for Will Alsop, especially Alsop's 'obsolete approaches to urban planning', his 'blindingly wrong' ideas and his thoughts on urbanism that are 'old hat'. Alsop's recent attack on Bath may have tipped him over the edge, since Beardmore has been involved in the urban conservation of the historic city for a long time. (At the recent 25th anniversary party for Avery Associates, Professor Richard West suggested that Alsop had sat in a

'Alsop's attack on Bath was boring. It betrays his obsession with the spectacular at the expense of the quietly elegant'

lecture by Brian Avery back in the 1970s and listened to a speech about the motorway as a linear city, which he said seemed to have been regurgitated in Alsop's 'Supercities' TV programme.) Actually, Beardmore condemns the linear city model as 'crackpot 1920s sloppy thinking'.

There are three types of planning applications, he says. There's the ones that are obvious refusals; ones that just need a little bit of an effort simply to knock them into shape; and those in the middle.

It is this final category that Beardmore believes should have time, money and attention spent on them – 'the ones where the arguments are finely balanced'. He admits that it is not up to him to 'take the pencil out of the architect's hand, but if they refuse to analyse the topography of the site, consider the views, to realise the valuable contribution that the design should make in enhancing the area, and fail to explore the overall contextualism of the site surroundings', then he has a duty to intervene.

The fact that architects do not like planners – and conservation planners in particular – is sometimes warrant-

ed, he says. There are definitely too many English Heritage case offices, for example. But even though conservation planning specialists do not always have to take a balanced view of a given proposal, they frequently do and the problems are overstated. This often stems from the uncompromising, paranoid nature of architects, rather than the attitude of the planners. For example, he says that 'architects, particularly those who have been to the AA, won't collaborate'.

Some might find it uncomfortable that a planner, who is saying that he wants to work in creative partnership with an architect, could come out with things like 'architects do not have a monopoly of wisdom nor are they always the natural leaders on a project'. He is very much an active participant in the design, development and commissioning process.

He says: 'If "signature" architects persist in attacking the very concept of planning and believe they have all the answers, then we planners... must challenge the arrogance and shallowness of their thinking. Professional fisticuffs or an active collaboration for the good of all – which is it to be?'



Unfair contract revision offers the chance to win back trust

Philip Britton's recent talk to the Society of Construction Law in May 2004 bore the catchy title 'The Architect, the Banker, his Wife and the Adjudicator'. Behind that cinematic facade lay much weighty thought on the topic of unfair contracts, a paper about which won the director of the Centre of Construction Law at King's College London last year's prestigious Hudson prize.

The link between the topic and the title is the case of *Picardi v Cuniberti* (AJ 6.3.03), in which the court considered whether Mr Cuniberti (a banker) and his wife were bound by an adjudicator's decision in favour of Mr Picardi, their architect. Britton used this and two others (*Lovell v Legg and Carter*, AJ 4.3.04, and *Westminster v Beckingham*, AJ 1.4.04), as a starting point for his examination of unfair contract terms legislation and the construction industry.

He concluded that the legislation has more relevance to construction than might at first be thought. What is more, it may be due for a shake-up, following the Law Commission's recent consultation paper. This may result in provisions being extended to cover business-to-business (B2B) transactions, as well as business-to-consumer (B2C). Britton suggested that there is potential for unfair contract controls to benefit new collaborative ways of working, as well as closing the 'enormous gulf of distrust between domestic clients and the supply side for house building, refurbishment and repair'.

So what is the present unfair contract regime? It arises under two quite separate and different bits of legislation.

First is the home-grown Unfair Contract Terms Act 1977 (UCTA), which focuses on limitation or exclusion clauses. For example, any clause that restricts liability for causing death or personal injury is struck down by the Act and so cannot be relied on. The Act deals mainly with exclusions in the context of 'business liability'. In some instances the restriction only operates in relation to B2C contracts; in others to both B2C and B2B.

Second is the European-nurtured Unfair Terms in Consumer Contracts Regulations 1993, apply-

ing only where one party is a consumer, also by striking down unfair terms. It was UTCCR that came into play in the adjudication cases.

As might be expected of two pieces of legislation of such differing provenances and dates, the overall regime is neither comprehensive nor straightforward. The Law Commission has suggested replacing UCTA and UTCCR with a single statute. Its final report is expected this year, and we shall have to wait and see to what extent its proposals extend to B2B transactions and, if so, whether only to smaller businesses.

What sort of provisions in construction-related contracts might potentially fall foul of unfair contract legislation? As well as the fairness of adjudication provisions, the court has considered the status of an arbitration clause in an NHBC contract.

Provisions that limit or exclude legal rights that might otherwise be available may be unfair. These could include the right to set off counterclaimed sums; contractually fixing a claim period shorter than the statutory limitation period; and; excluding entitlement to consequential losses that might otherwise be available. Within the confines of a contract itself, restricting liability to the other party, for example, by the use of

capping figure, may be unfair. So too might be a provision that deems that a written agreement embodies an entire contract, preventing parties relying on pre-contractual representations.

It can be seen that many aspects of contracts in the construction industry, including parts of some standard forms, may already be potentially caught by the unfair contract legislation. Picardi illustrated that professional forms of appointment can come under the spotlight. As the Law Commission's proposals move forward, we may see lobbying from groups anxious to limit restrictions on their ability to contract how they please. Such interests need to be balanced against the laudable aims of encouraging new ways of working and improving confidence in the construction industry.

Sue Lindsey

¹ www.scl.org.uk

Linux's Microsoft stink to come up smelling of roses

Three months to go before the silly season but it surely is Linux time again. Seasoned readers will remember various attempts by this column to get to grips with this Unix-like alternative to Microsoft's Windows operating system. Just in passing, Mac OS X is also a Unix-like operating system. There are more than 50 variants on Unix – among whose various proprietary forms are Xenix, HP/UX, AIX, Solaris and IRIX. They tend to cost a lot of dosh. Linux is free.

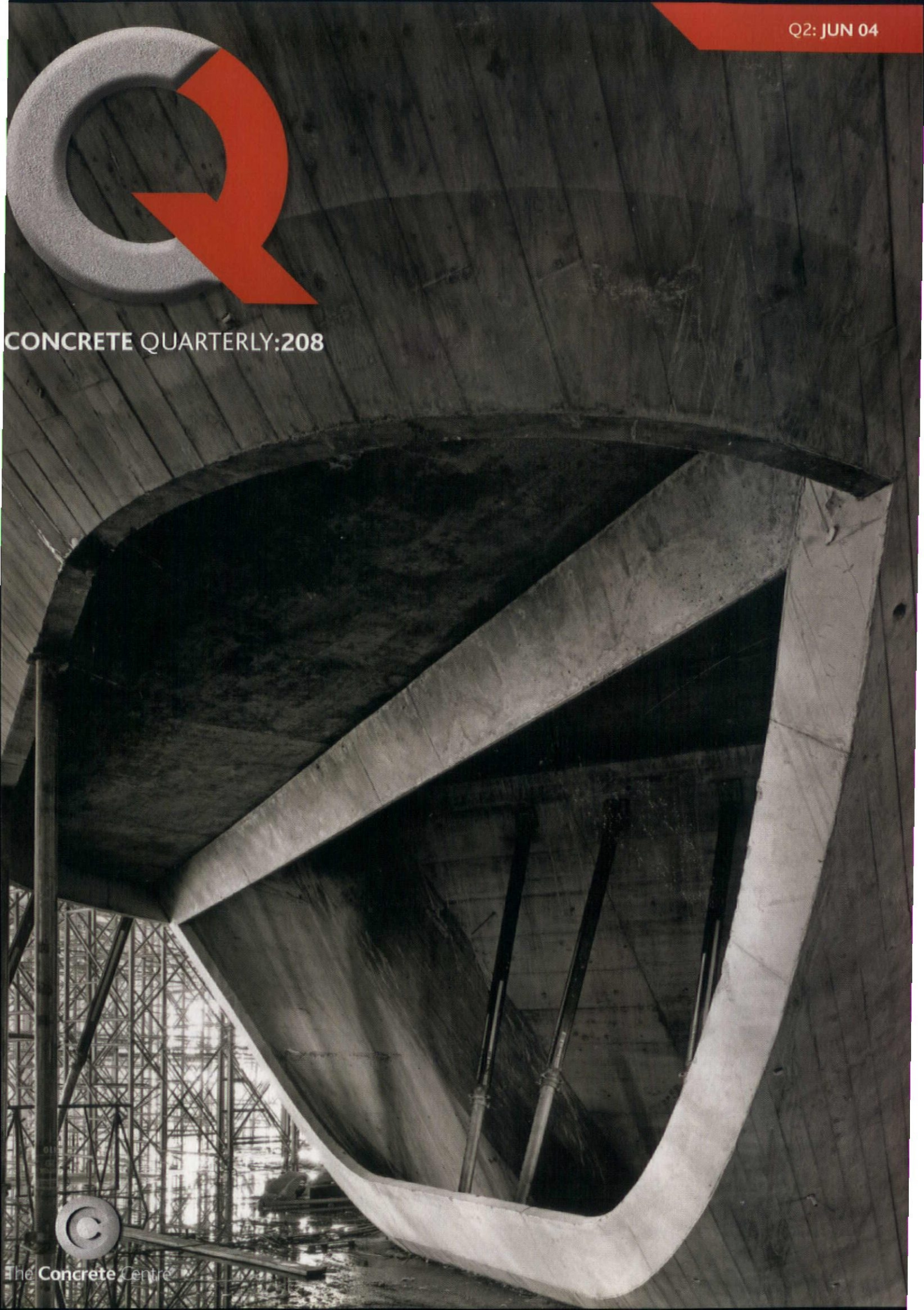
It is developed by a myriad of programming nutters who do it for the fun of coding applications that work specifically with the core Linux operating program, which was designed, as you probably can't avoid knowing, by Linus Torvalds. Unlike every other success story in modern computing, he does not seem to be a billionaire. So you think: hippy, pony tails, wild eyes and lots of pleasurable substance abuse. I couldn't possibly comment, although Torvalds seems to have remained the nice, clean-cut Scandinavian lad he was when he started on Linux as a student project. (OK, I don't have space for Richard Stallman and the GNU project, so please don't write in.)

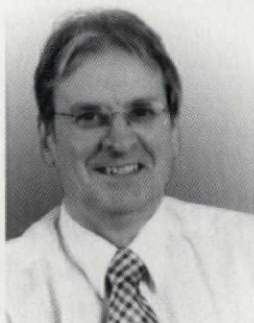
Linux and the way it is distributed breaks all the conventions of classical capitalist marketing. None of this identifying and satisfying customer need – it is developed because individuals think it would be interesting to have a shot at extending the Linux envelope or filling in the holes. Think of them as enterprising deli counter staff and Linux as a cross between Brie and Gorgonzola.

Naturally, Microsoft hates the very smell of it and words like 'un-American' have been shouted from the safety of the US commercial backwoods. It needs to be said that Linux is almost there, that it will be up there with Windows, ahem, 'real soon now'. So with the release a week ago of Mandrake Linux version 10, this column is starting on a fresh attempt to get the operating system going on the second hard disk of a double-booting Windows machine. I'll report back soon. sutherland.lyall@btinternet.com



CONCRETE QUARTERLY:208





There is definitely an increased sense of confidence in concrete. This is underlined by the growing appreciation by designers,

constructors and end users of the many inherent benefits of concrete construction. These include fire protection, thermal and energy efficiency, robust construction, low maintenance and an unrivalled range of structural solutions and architectural finishes.

Further evidence of this new confidence comes from the ongoing development of new concrete products and construction techniques. Innovations such as the introduction of insulating concrete formwork and improvement in precast products offer faster construction, improved thermal and acoustic insulation, greater design flexibility and reduced on-site manpower requirements. And the publication of new research, best-practice guides and learning resources shows how the full potential of concrete construction can be achieved.

A new symbol of the confidence of the cement and concrete industry is the establishment of a national centre of cement and concrete excellence, based at Camberley, Surrey, which will be opened formally this month. Headed by the British Cement Association, the Concrete Society and The Concrete Centre, this new centre brings together a wealth of experience and expertise and acts as a focus for innovation and market development. The centre is further strengthened by the inclusion and partnership of key industry bodies such as CONSTRUCT, Britpave and Interpave.

The growing appreciation of concrete is no passing fad. It is a renewed realisation of the material's architectural aesthetics, design, construction, performance and economic benefits. The new centre, by providing a central focus for the industry, will ensure that designers, engineers and constructors can specify concrete, confident in the knowledge that it offers the better solution.

Ian Cox, chief executive, The Concrete Centre

Cover image shows Phaeno Science Centre, Wolfsburg, Germany.
Photograph by Helene Binet

ROUND-UP



Polished performance

Architect Barnsley Hewett and Mallinson has demonstrated a striking contrast in textures and colours for the new Walsall Academy secondary school in the West Midlands.

The architect specified Polished Jade Architectural Facing Masonry blocks from Lignacite, and constructed alternate bands of smooth-faced polished block and more textured sandstone bricks. Tinted windows and silver columns set off the futuristic design.

The polished blockwork was used internally and externally on the project. Durable enough to withstand the daily rough and tumble of a high-traffic school environment, it also provides good acoustic properties in line with recent reports on the benefits of acoustics protection in a learning environment.

Lignacite's polished facing masonry is available in nine colours and has an easily visible aggregate grain and depth of colour below the brilliant surface. The polished effect is made up of natural reconstituted limestone.

Elegance workshops

Future architectural workshops in the 'Concrete Elegance' series have been announced. They include: 9 June – Residential Delights: elegant concrete houses; 15 September – Sculptural Inspirations: concrete as art; 20 October – Prefabricated Perfection: the Bridge of Peace in Seoul.

Attendance at the workshops is free, all held from 6.30pm at the Building Centre, 26 Store Street, London WC1. For further details, contact Andrew Scoones, tel 020 7692 6209, email events@buildingcentre.org or register online at www.concretecentre.com

CPD becomes painless

'Twenty days of CPD training on concrete design and construction for the price of a text book.' That is the promise from The Concrete Centre with its launch of the new updated version of CALcrete, 'the computer-aided learning package', which covers major aspects of concrete materials, design and construction.

Initially developed by the Reinforced Concrete Council, CALcrete has been updated under a Concrete Centre/DTI-backed Partnership in Innovation project to provide additional modules that include designing to the latest version of EC2, health and safety and environmental issues.

Existing modules include precast, hybrid and prestressed concrete, concrete design to both EC2 and BS8110, concrete bridges and pavements, and good site practice. All have been written and developed to ensure industry relevance and to encourage flexible and interactive learning.

Introductory CALcrete modules can be downloaded free of charge from The Concrete Centre's website at www.concretecentre.com.

The full suite of modules is available from the Concrete Bookshop, tel 01344 725704, for £50 including VAT and p&p.

In case of fire

New research published by the BRE has found not only that reinforced concrete is over-designed under current British Standards, but also that the development of the structural Eurocodes will enable designers to adopt a more performance-based approach.

The research report, *The Fire Safety of Concrete Structures: Background to BS 8110 Fire Design*, shows that the historical tests that provide the basis for design of reinforced concrete hold up well when analysed under modern conditions, and in many cases exceed requirements. Research examined the performance of concrete elements under tabulated design figures taken from historical test data. In particular, it found that load ratio does not appear to have a significant impact, and that existing provisions for the fire resistance of reinforced concrete beams are extremely conservative.

The prescriptive design approach of BS 8110 has worked well because of its inherent simplicity. This is demonstrated by the performance of real buildings in real fires. However, in recent years fire engineering design has moved towards a performance-based approach, for which the structural Eurocodes will enable a more economic design process.

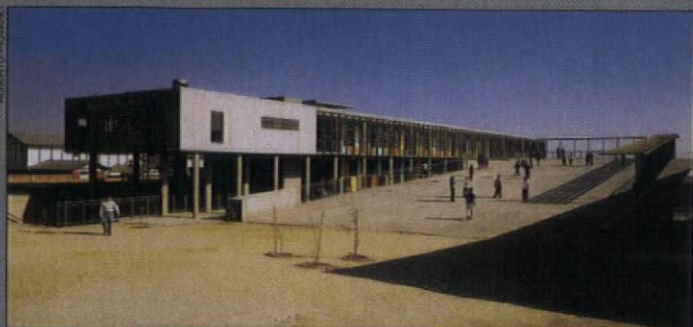


The hole thing

The challenge created by unsightly tie holes in facades has long been a thorny issue but architect Ada Karmi-Melamede has addressed this innovatively at her life-sciences complex for the University of Negev in Israel. The nature of the building dictated that vital formwork supports would have interrupted the regular grid of ties, but Karmi-Melamede introduced a method of stabilising the formwork from the outside and developed 'mini' ties, some 25 per cent of the normal diameter. This process is described in her book, which uses the project to explore her love of concrete. *Ada Karmi-Melamede Architect: Life Sciences Buildings* is published by Birkhäuser, £42.09.

On the horizon

Mathias Klotz has created some fine examples of architecture in concrete. While outwardly different, many of his buildings display threads of continuity. One such is his repeated use of a raised linear bar defining a strong horizontal datum against a sloping site, forming a new horizon against which the site can be registered. In his Viejo House in Santiago he handles the weight, roughness and plasticity of concrete in a fresh manner but still brings a sense of mass and gravity that is absent in his other work. Further examples of his work are found in *Mathias Klotz (2G S.)*, published by Gustavo Gili, £19.50.





Simple answers to museum complexity

Zaha Hadid's vast Phaeno Science Centre in Wolfsburg, Germany, blurs the traditional boundaries between structural elements. Engineer Adams Kara Taylor therefore had to take a new approach to the supply of information

By Margo Cole. Main photographs by Helene Binet

The Phaeno Science Centre in Wolfsburg, northern Germany, appears, in the words of its designer, as 'a mysterious object, giving rise to curiosity and discovery'. The museum building occupies a high-profile site at the end point of a chain of important cultural buildings – by Aalto, Scharoun and Schweger – in the town and also provides new public spaces both within and outside its walls.

According to the designer, Zaha Hadid Architects, 'the visitor is faced with a degree of complexity and strangeness, which is ruled by 'a very specific system of structural organisation'.

In simple terms, the building consists of a basement car park out of which rise 10 reinforced-concrete 'cones', flaring out to support the main exhibition space two storeys above. Each cone is of a different geometric shape, and they all change shape as they rise. Four of the cones continue through the exhibition concourse to support the steel-framed, metal-clad roof.

It is a vast building, measuring 150 x 80m and encompassing 12,000m² of exhibition space. The cones, main floor slab and much of the facade are made from in situ reinforced concrete without a single movement joint.

Although there might be 'very specific structural organisation', it is not a traditional

hierarchical system of primary and secondary structural elements. Instead, the cones, slab and facade act together as a single structure. 'The facade is sometimes being supported by the slab, and sometimes it is supporting the slab,' explains Julian Birbeck, design engineer with the building's structural engineer, Adams Kara Taylor (AKT). 'The cone walls are inclined up to 45°, which blurs the boundaries between walls and floors.'

This blurring also occurs in the relationship between the cones and the slab. Although the cones are the main support for the building, they also depend on the slab for restraint. As Paul Scott, AKT's project engineer, says: 'The building is fooling itself a lot of the time.'

The single life

The only way for AKT to approach the structural design of the building was to treat it as a single entity, rather than breaking it down into traditional elements, and then analyse the whole building for gravity loads, thermal loads and shrinkage in one model. 'It meant we could break free from the traditional engineering approach of beams and columns,' says Birbeck.

This is particularly evident when considering the cones, all of which have openings in them to

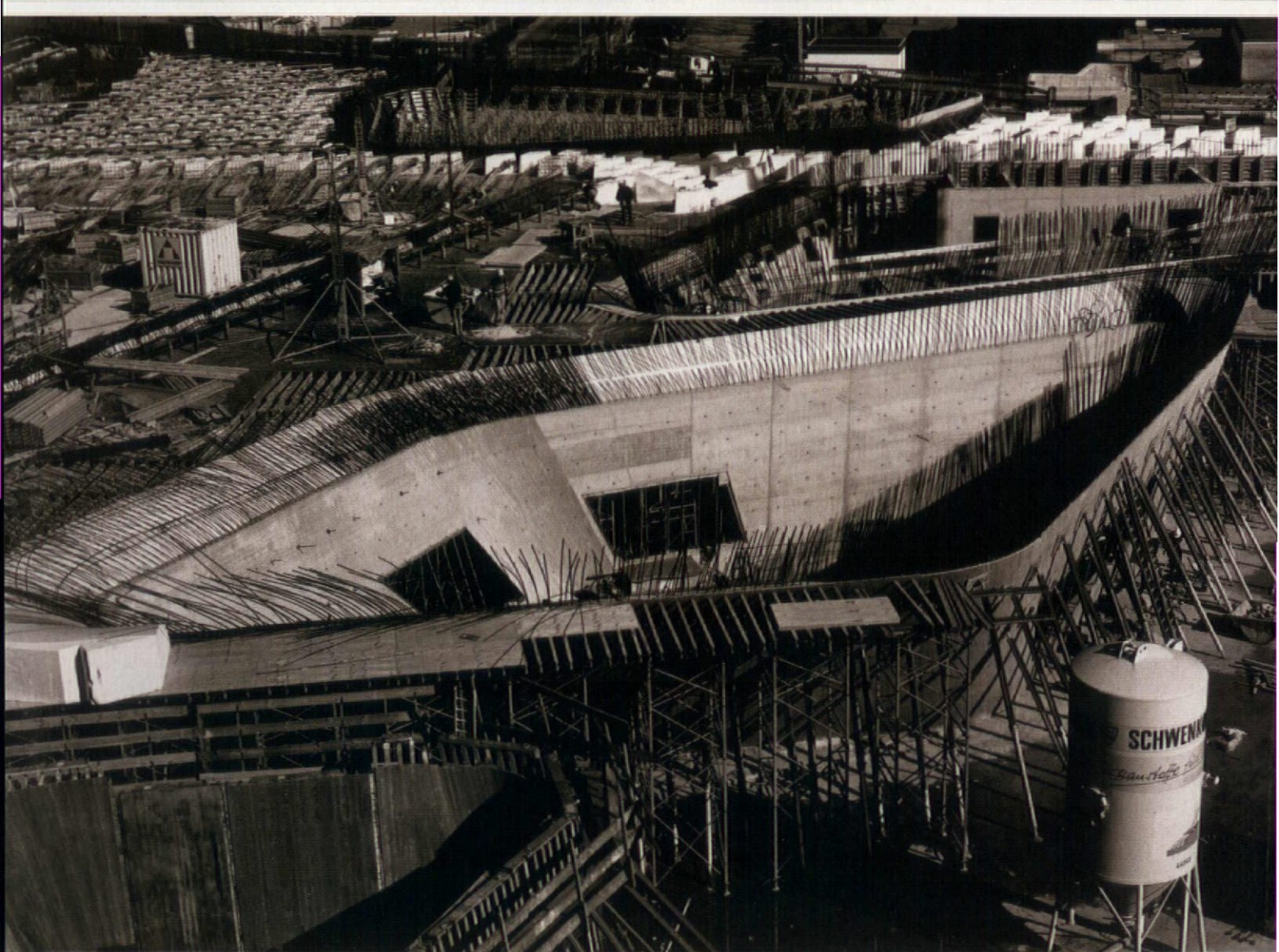
house functions of the museum – such as WCs, gift shop and auditorium – and entrances and public spaces at ground-floor level. 'Structurally they are not quite one thing, and not quite another,' says Scott. 'I suppose they are part arch and part beam, but we had to get away from the traditional idea of thinking of it in terms of structural elements and naming them.'

The next challenge was to work out how to build the structure. All the concrete was to be placed using traditional hand-built timber formwork, so the engineer had to provide construction information in a format that the concrete contractor could easily understand and use.

Zaha Hadid's concept was of a floor space melting down into the 10 cones with their geometry undefined. AKT redefined the cones so that each was either a triangle or quadrilateral in plan with rounded corners of fixed radii. Although the shapes will change from ground floor to concourse level as the cones flare out, they will continue to be either triangles or rectangles.

The underlying principle of construction is that setting-out details were provided for the cones at the two levels, and the line of the walls could then be interpolated linearly between the two. A triangular cone could

Above: visualisation by Zaha Hadid. Opposite: the complex and congested site (top). Cones are either quadrilateral or triangular on plan (bottom)

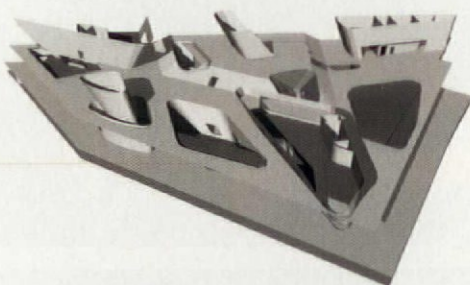


ROOF LEVEL



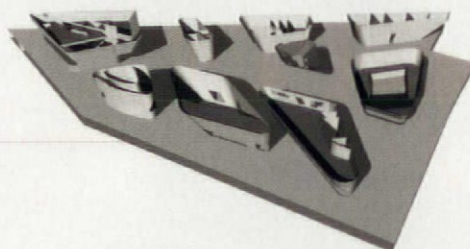
THIRD POUR

CONCOURSE LEVEL



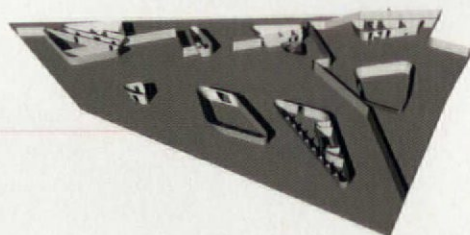
SECOND POUR

GROUND LEVEL



FIRST POUR

BASEMENT LEVEL



Sequence of concrete pours

therefore be set out using 12 setting out points: the six tangent points between the curve radii and straight lines on the two levels. 'That was the key to allowing the design process to continue,' says Scott. 'If we didn't appreciate that need for simplicity at the early stages, we would have had problems later on.'

Having refined the geometry of the cones, the engineer then had to find a way to create the irregular openings that are sliced into each one. Initially it designed the plane of each slice, then used Microstation to create

the slice and define all the key points, such as the centre points and radii for each arc.

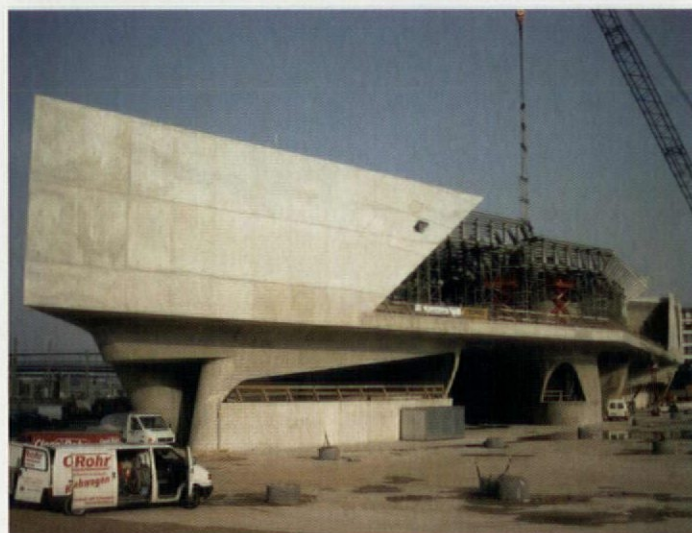
These details went back and forth between architect and engineer until both reached what Scott describes as 'a structural and geometric comfort point'.

Once everyone was happy, the information was translated into setting-out information for the formwork, which was supplied by defining the angle of each cutting plane, and then giving setting out information on that plane.

Having established how to set out and build the formwork, AKT



Dense reinforcement required the use of a self-compacting admixture



There are no movement joints in the walls

then had to devise a system that would enable the steel fixers to install the reinforcement in the irregularly shaped cones. The subcontractor opted to erect the forms for the outside surface of each wall, and then to allow the steel fixers to work inside the formwork. To enable them to set out the reinforcing bars, AKT had to present them with an 'unfolded' version of each inside face. As Birbeck says: 'We were collapsing the 3D world into 2D.'

Scott adds: 'In Germany there are quite traditional ways of producing drawings. We had to

step out of that for this project. Drawing traditions were questioned a lot, as were materials and the way things were built.'

Although the basic construction method is traditional – reinforced concrete the equivalent of C50 in timber forms – the material is not. The engineer specified concrete with a self-compacting admixture for the cone walls and parts of the concourse slab. There were two main reasons for this: the height of the pours – up to 8m in one pour – and the inclination of some walls.

The external walls of the



The cones and the slabs depend on each other for support

cones are only 300mm thick, and are very heavily reinforced, making it difficult to use a traditional poker to compact the concrete. In addition, the walls slope at angles of up to 45°.

'The self-compacting admixture gels the mix together,' says Scott. 'It has given us a finish that would have been impossible to achieve through general construction techniques.'

Continuous concrete supply was crucial for the big pours, as the admixture has a tendency to accelerate the concrete going off. 'If the mix didn't come to site

quickly, the surface would start to harden,' explains Scott. 'But the benefits far outweighed trying to use traditional mixes.'

The walls are quite heavily reinforced, partly to control the cracking that is inevitable in such large expanses of concrete with no movement joints. 'We know it is going to crack,' says Birbeck, 'but it's about having enough reinforcement to control those cracks so they're invisible.' The result is a reinforcement schedule that includes small bars fixed close together, with horizontal bars at

75 or 100mm spacings.

Since the structure was designed as a single entity, and the cones and slab are so dependent on each other for support, the whole structure had to be propped until the entire concourse slab had been poured. A forest of steel props gave temporary support to the slab, while more props held up the inclined cone walls. Those props have all now been removed, as the steel roof structure is now being erected. Later this summer the main glass facade will start to go up.

For AKT the whole experience

has been liberating, both in design terms and the way it has presented the construction information. As Scott says: 'If we can't free ourselves from convention, we are going to find it hard to move forward with complex forms.'

Zaha Hadid will present the 2004 BCA Berthold Lubetkin Lecture, sponsored by The Concrete Centre, on 17 November at the RIBA, London. For further details and registration visit www.concrete-centre.com, email seminars@concretecentre.com, or tel 0700 4 500 500

A sliced opening in structural concrete

Ten 'cones' rise from ground level to support the exhibition concourse of the museum at Wolfsburg. Each cone is a unique, irregular arrangement of canted walls punctuated with large openings.

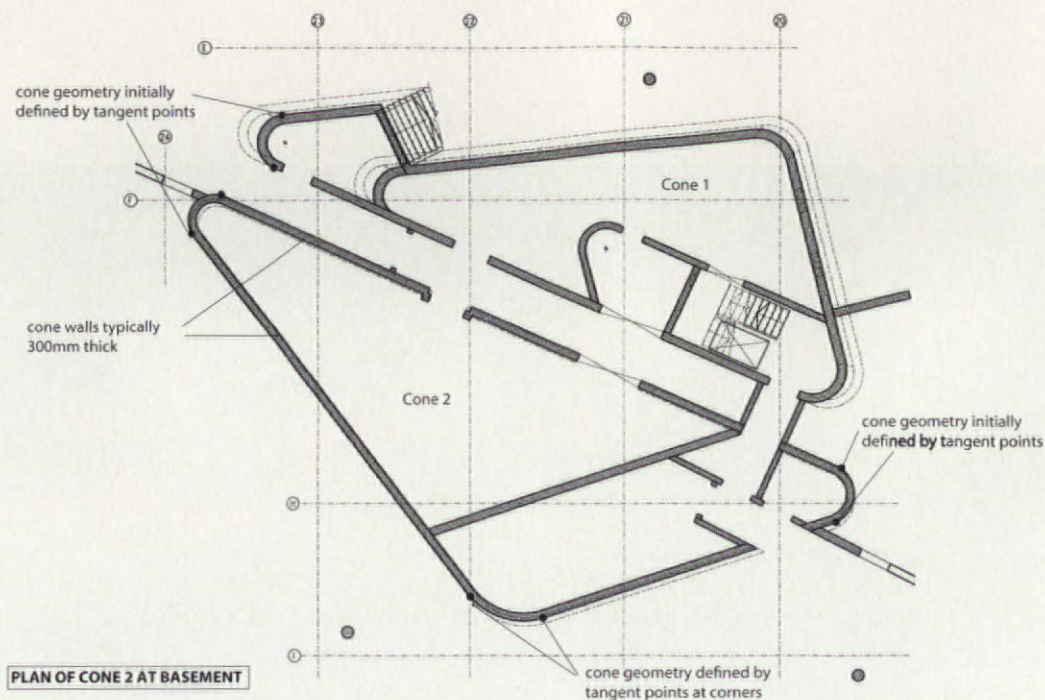
Initially, the architect devised the cone geometry. Through discussion with engineer Adams Kara Taylor, it was agreed that the complex geometry could be defined by fixing a small number of points in space – namely the 'tangent points' where the straight walls meet the curved corners. Hence, by fixing the tangent points at two levels, a three-dimensional CAD model of each cone was created, which could be used to interpolate plans at all levels.

Once the basic geometry of the cone was defined, the architect decided the size and location of the large openings. The 'cutting plane' for each was described by setting out two points on plan and defining the angle of inclination. It was then possible to recreate this plane in the structural CAD model.

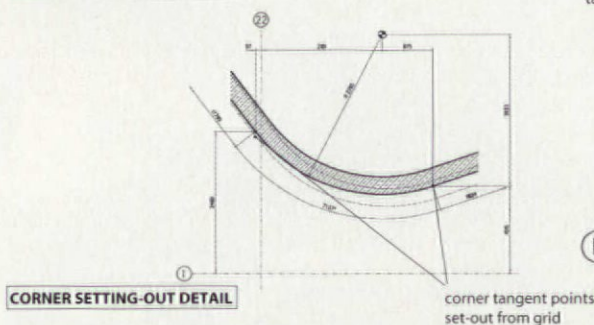
The details show the formwork drawings created for the large opening in Cone 2. First the cutting plane was defined, and then 'true' elevations – normal to the cutting plane – were produced. On these elevations, the curves created by the intersection of the cutting plane and the corners were set out.

As well as drawings relating to the concrete formwork, drawings were needed for the fixing of the steel reinforcement. These need to show all cone walls simultaneously in true view. Consequently, the architect had to create unfolded elevations of each cone that were turned into a reinforcement drawing – a highly labour-intensive process. AKT is optimistic that in the future this process will be replaced by the direct transfer of three-dimensional CAD information to site.

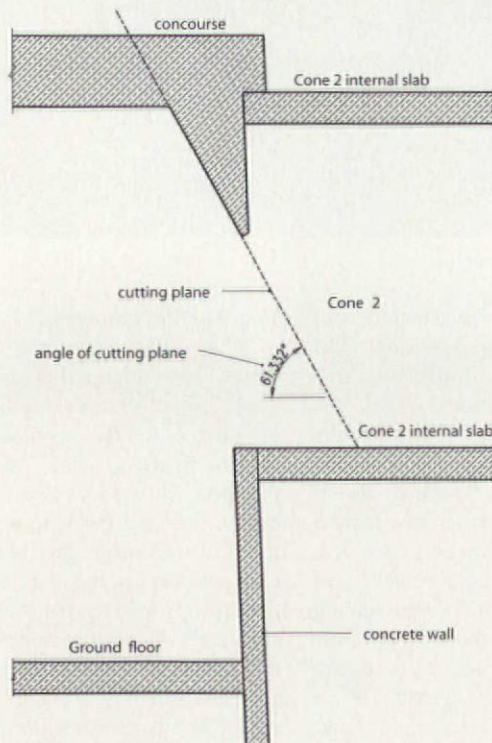
Lenny Sequeira



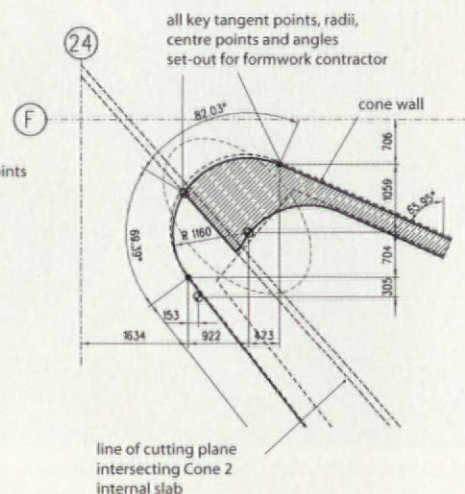
PLAN OF CONE 2 AT BASEMENT



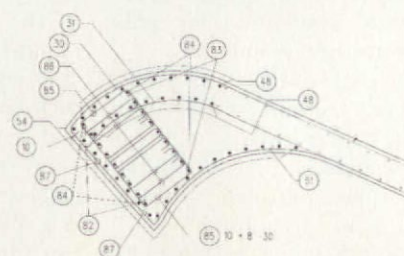
CORNER SETTING-OUT DETAIL



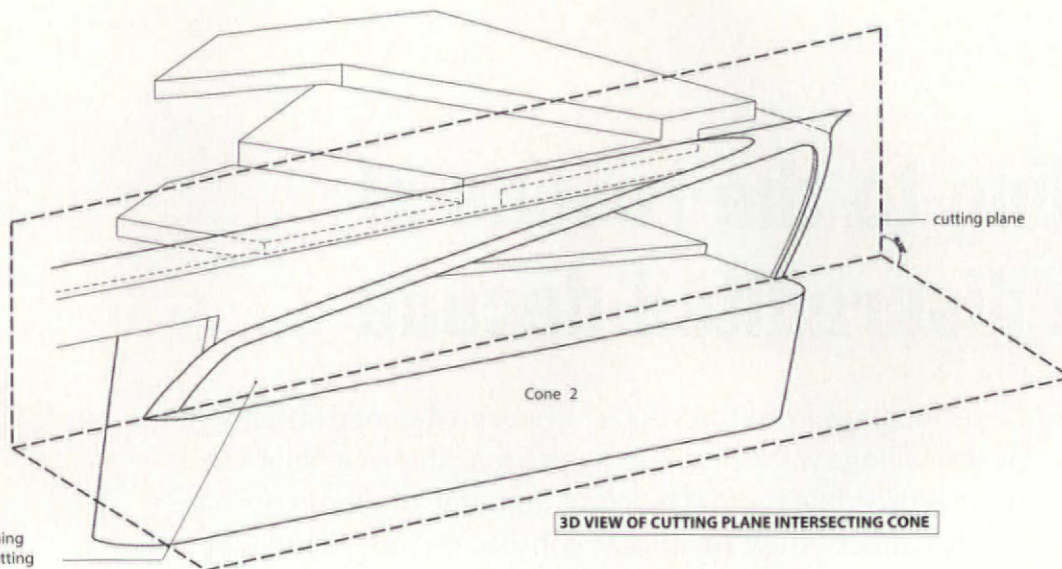
SECTION THROUGH OPENING



DETAIL OF CUTTING PLANE AT CONE CORNER

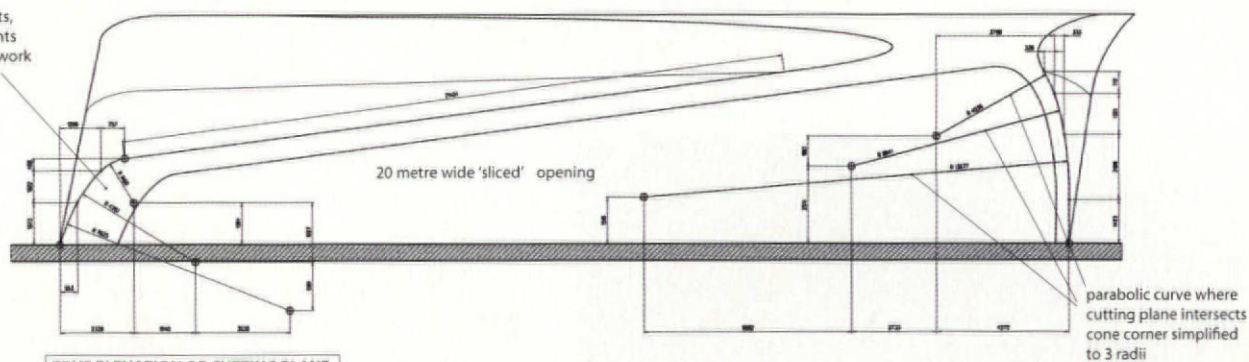


PLAN DETAIL OF REINFORCEMENT IN CONE CORNER

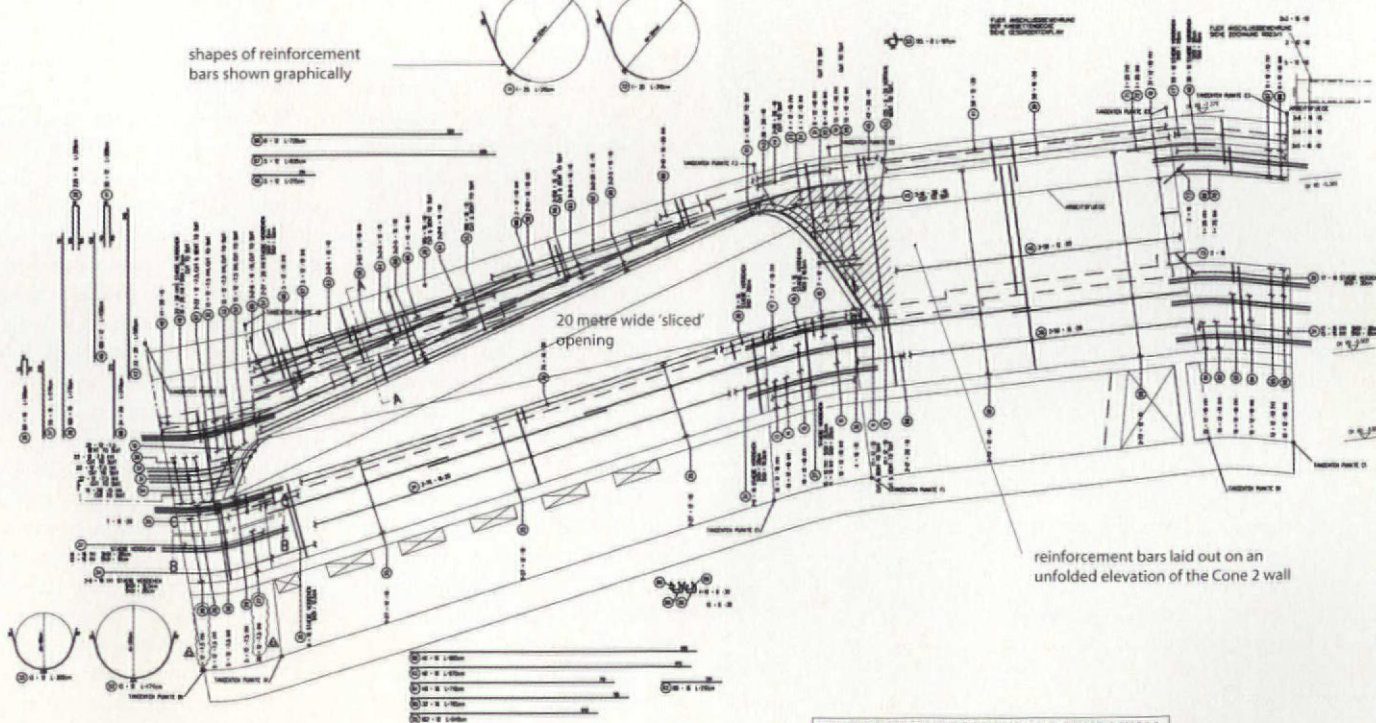
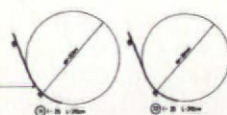


20 metre wide 'sliced' opening created by intersection of cutting plane with concrete wall

all key tangent points, radii and centre points set-out for the formwork contractor



shapes of reinforcement bars shown graphically



Riding to the rescue of the discredited decade

Many concrete buildings from the 1960s have been damned unfairly when their main failings were either poor workmanship or a failure to adapt to later needs. While there is no place for many of them, some are being rescued because of their significant contribution to UK heritage

By Michael Hammond



West London's Empress State office building has a new life

EDMUND SUMNER

It seemed like a good idea at the time. With extensive bomb-damaged areas in the cities, a rising population and the increasing popularity of the car, the country needed rebuilding, and fast. Concrete provided the answer – quick, economical and strong. It also provided an opportunity to break away from the traditional forms of brickwork and tiled roofs, adding fuel to the Modernist movement. The post-war period was an era of optimism probably unrivalled in scale since the Victorian period.

Facilitating rising traffic levels and provision of parking in city centres was high on planners' agendas. Infrastructure creation played an important role in many urban redevelopment schemes, but it also had a dramatic effect on the streetscape.

Today, of course, cars are being forced out of towns and some of these massive concrete structures are wholly inappropriate. The demands of the modern office have also changed, which the structural frames of many buildings from that era cannot accommodate. In the 1980s there was a leap

from a general floor height of about 3m to 4.5m.

Examples of buildings caught in the transition can still be seen. Goldman Sachs' European headquarters, Peterborough Court on London's Fleet Street, was granted outline permission based on floorspace. However, the detailed design incorporated the new ceiling height and the result was an extraordinarily lumpy appearance.

Meanwhile, on the housing front, a proliferation of towers was providing the much needed volume of low-cost accommodation. Local authorities embraced new 'system building' techniques that yielded even quicker build times. Unfortunately many were also of low quality, and this process came to a crashing conclusion in 1968 with the Ronan Point collapse. That proved a wake-up call for designers, and became a crucial turning point in public opinion. Concrete structures became inextricably linked with 'cheap' council housing, a prejudice further exacerbated by the poor living conditions in many blocks.

The stigma of this post-war vision has been difficult to shake off. Urban strategist Richard

Coleman is unsympathetic to the plight of the 1960s monoliths: 'The reputation of architects and planners has been, up until the last 10 years, completely damned by that era. Ten years ago there was no confidence in architecture in Britain and many of the UK's leading architects – Richard Rogers, Norman Foster, Will Alsop – were working abroad because of those buildings that we are knocking down now.'

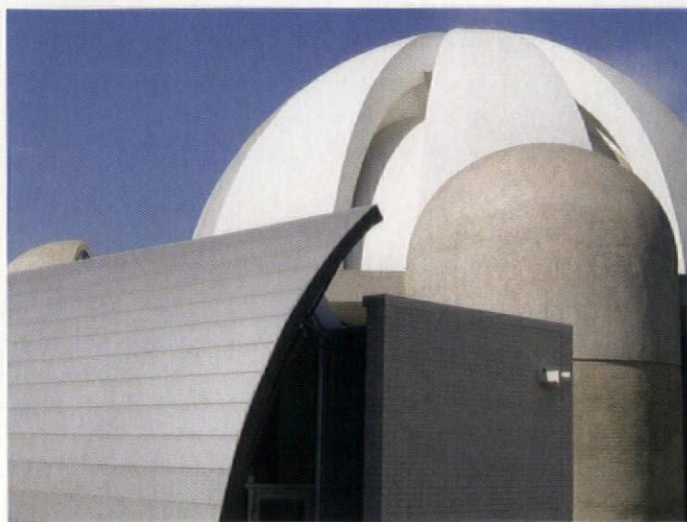
'The average British person wasn't educated in design in the same way they were in France or Italy,' says Coleman. 'Other European countries seem to have a more sophisticated approach, and were more able to embrace the design. Style to them is of the utmost importance.'

The invisible hulk

Many of these concrete hulks are already disappearing as their outdated superstructures conflict with commercial pressures for new buildings, often proving to be worth no more than their vacant sites.

Even the more respected examples, such as Seifert's first post-war tower for London (28 floors/100m), are now scheduled for demolition. Drapers Gardens failed to secure life-saving listing status like its big sister, Centre Point despite intensive lobbying by the Twentieth Century Society for 'an iconic building that has become a reference point for this era and one that Seifert is on record as having described as his proudest achievement', concluding, 'it would, therefore, be an enormous loss to the City'.

Other recent losses to the bulldozer in London have included Paternoster Square and Stag Place, while the 1958 Lloyd's Building on Lime Street and the Bullring in Birmingham are destined for the same fate.



Upgrading of New Hall, Cambridge, enhanced its original qualities

However, there are some fine examples that have managed to make a significant contribution to UK heritage, and are now regarded as jewels of the controversial Brutalist era. The challenge is not only to upgrade these buildings sympathetically but also to introduce contemporary elements that will bring them up to date without destroying their integrity.

New Hall college in Cambridge, having gained the elusive Grade II* listing, is one such

example where innovative architecture has created a refreshing and compelling fusion of contemporary designs. Originally designed by Chamberlin Powell & Bon of Barbican fame, New Hall had, by the mid-'90s, fallen into a state of severe disrepair and required major refurbishment to meet future needs. RH Partnership was appointed in 1998 to take up the challenge.

Nicholas Wright, New Hall's bursar, explains: 'We were extremely concerned that the

original character of New Hall was maintained while being acutely aware of the need to update and modernise the buildings. RH Partnership understood our requirements and successfully translated them into effective contemporary solutions that are sympathetic to the heritage of the building.'

In Fulham, Wilkinson Eyre has successfully transformed the Y-shaped 30-storey Empress State office building with three additional floors in steel and glass, and a 26-storey addition to the south elevation.

Further south, damaged by the salt-laden gales assailing the Brighton seafront, the future of another icon of Modernism, Wells Coates' Embassy Court from the 1930s, also hung perilously between falling masonry and the passion of Bluestorm, the residents' group desperately fighting to save the building. In the middle of complex legal wranglings over ownership, Conran & Partners came to Bluestorm's rescue with a package to kick-start the renovation process of the Grade II-listed structure.

Paul Zara, Conran & Partners' project director, says: 'It's great to get an opportunity to bring our skills to rescue this important building. When restored, it will once again become a cornerstone of the seafront's architectural heritage, reflecting this almost extinct era.' Embassy Court's sister, the Isokon building in London, was also saved recently.

As with buildings from all periods, these concrete icons are undergoing a process of natural selection. The best and most flexible are finding new life, whereas many others have served their purpose... and their time.

The challenge now is to design quality replacements more suited to today's requirements.



Embassy Court, Brighton, was rescued by Conran & Partners

Material that broke the architectural mould

Introduced commercially only 30 years ago, use of glass reinforced concrete (GRC) quickly became established as designers realised the potential of its light weight, strength and versatility

By Iain Peter

As the name implies, glass-reinforced concrete comprises two essential components: alkali-resistant glass fibres and cement.

These are mixed with fine aggregate, water and chemical admixtures to provide a construction product of considerable strength and versatility that offers surprising lightness.

The glass fibre has a tensile strength three to four times greater than the equivalent steel fibre, making GRC a robust material with high

impact resistance.

Typically manufactured to a thickness of 10mm, GRC cladding panels, for example, are much lighter than their precast equivalents.

GRC can be formed with a wide variety of textures and colours to replicate natural materials, reconstructed stone or concrete finishes. It is not a single material but can be manufactured and engineered for a wide range of architectural and civil engineering projects.

Manufacturing process

GRC is generally manufactured by either spray process or pre-mix vibration casting, normally dictated by factors such as strength requirements, size of mould or specification.

As a general rule, larger items such as cladding panels are sprayed, whereas smaller items are manufactured from pre-mix GRC. Sprayed GRC is generally stronger, due to its higher glass fibre content of 5-6 per cent, with longer fibre length and planar orientation, together with a lower water/cement ratio.

Sprayed GRC

With the spray approach, the water and admixture (and polymer if used) are placed in a high-shear mixer, and the



The manufacture of GRC panels at Trent Concrete

sand/cement are added slowly until a smooth creamy slurry is achieved. The consistency of the slurry can be checked using a simple slump-test kit.

When ready, the mix is pumped at a regulated rate of flow to the spray gun where fibre, in the form of a roving, is added, chopped to a length of approximately 32mm.

The two materials are then projected on to the mould surface, using an air supply from a compressor.

The GRC material is built up in thin layers until the required thickness is achieved – normally 10-15mm, with simple hand rollers used to compact the material between layers. The mould is covered with polythene to prevent moisture loss until the next day when the product is then demoulded.

The units are allowed to cure for seven days, once again covered with polythene, although if a polymer curing compound is used in the mix, units can be exposed to the atmosphere immediately. It is advisable, however, to keep them protected from direct sunlight or severe external conditions for a day or two.

Pre-mix GRC

With pre-mix GRC, the sand and cement are mixed dry before the water/admixture and polymer (if used) are added. Generally, a two-speed slurry/fibre blender mixer is used.

The fast speed first creates a smooth creamy slurry. The mixer is then switched to slow speed, and fibre in the form of



Compressed air forces the GRC mix on to the mould

chopped strand of 13mm in length is added slowly and blended for about a minute.

Once the mix is ready, it is poured into moulds, which are vibrated using a vibrating table. The material is allowed to set, ready for demoulding the next day.

After demoulding, the product is cured under polythene sheets to maintain moisture for up to seven days. Alternatively, a polymer curing compound can be used.

Lightweight versatility

Both designers and constructors appreciate the lightweight versatility of GRC. This is especially important on congested inner city projects where GRC panels can cover three to four times the

area of precast concrete panels of the same weight, enabling lower-capacity cranes to be used to handle units.

The material can be moulded into a considerable range of architectural and engineering applications, from cladding and architectural features to sound-absorption barriers and sewer linings.

Cladding panels

GRC offers a wide range of opportunities for cladding. The sculptural nature of the material encourages innovation in shape, form and texture.

GRC cladding panels, both single-skin and sandwich, are being used increasingly for industrial and warehousing projects because of the cost savings

in transport and erection.

One of the most important developments has been the adaptation of the 'stud frame' construction technique to GRC facades on high-rise buildings. Here, single-skin GRC cladding panels are attached to the stud frame by means of special joints. The result is a far lighter cladding system.

Temporary works

GRC is particularly well suited to use as both permanent and temporary formwork.

The material has been used successfully in parapet shutters, bridge decking and in the construction of retaining walls and sewer linings.

Refurbishment

GRC is also used widely in the repair and renovation of old concrete and stone buildings, where it scores on mouldability and its ability to be formed in different finishes. GRC is particularly suited to simulating stone and brick.

The future

Already a widely used material, GRC is predicted to increase its application as concerns over the material's long-term performance are overcome by the positive real-time experience in a variety of world climates, as reported at the last GRCA International Congress, 'GRC 2003', held in Barcelona last October.

Iain Peter is chairman of the Glass Reinforced Concrete Council (GRCA). For more information on GRC and the GRCA visit: www.grca.co.uk



FAVOURITE BUILDING JAMIE FOBERT TALKS TO CRISTINA ESPOSITO ABOUT TADAO ANDO'S CHAPEL ON MOUNT ROKKO

Jamie Fobert has an issue with typecasting. If recognition comes at a price, then Fobert may well have designed himself a concrete albatross.

The multi-award-winning Anderson House is celebrated for, among other things, its stark but quirky concrete-cast-against-cellophane interior, and you get the distinct impression that this aspect comes up in conversation rather a lot. Somewhat hastily, Fobert points out that his work is not about empty gestures and repeated techniques, but 'what's appropriate. Context and exploration.' This may explain why Fobert has chosen Tadao Ando's Chapel on Mount Rokko in Japan (*right*) as his favourite concrete building.

When Fobert arrived in Japan for the first time in 1988, he wondered if he had walked into some fantastical Ando-engineered super city. He had seen the pictures of the chapel, and was intrigued by the use of horizontal concrete panelling, patterned with regular six-hole indentations.

Unknown to Fobert at the time, this particular manipulation of concrete was a relatively standard construction method, used for example in Kahn's Salk Institute in California.

Fobert recounts that the chapel, with its almost corporate Minimalism, was 'mesmerising'. But even more fascinating was the very soft, cushion-effect of the interior concrete walls.

'In concrete formworks, architects often strive for rigidity, for a perfect parallel. So this was a whole new concept. I had



MITSUO MATSUKI

never seen anything so sculpturally extraordinary.'

Fobert is perplexed as to how the effect was achieved – his theories include shuttering made from either thin or soaked plywood sheet, which in both instances would 'give', allowing the concrete to warp and produce the strange contours. 'Or maybe it was just a mistake,' he offers. 'I've certainly never seen it anywhere since.'

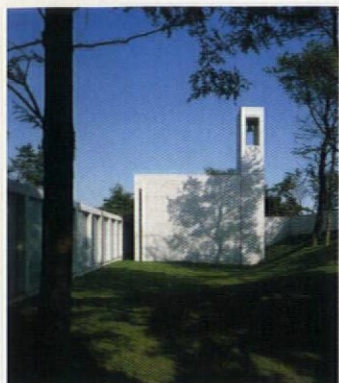
Fobert appreciates the way the undulating concrete is

enhanced by the clever use of natural and artificial light. 'It really brings the concrete to life. Ando was unafraid of not just accepting, but embracing, the natural imperfections in the material.'

But what Fobert loves best is taking something standard and elevating it to perfection. 'That simple six-hole method was suddenly made incredible,' he muses. 'That's the genius; in recognising the potential of what you're working with.'

Fobert admits that while he finds much of Ando's work 'a little cold', the influence of Mount Rokko on his own interpretation of concrete was huge. 'The plank-work mode of casting is very English,' he states, 'It has produced some great buildings, but it hasn't influenced our work.'

You only need to look briefly at a cross-section of Fobert projects for evidence of an unyielding devotion to creating something a little different,



LETTER FROM BEIJING

Someone asked me if I thought Beijing was a concrete jungle, writes *Fay Chan*. I'd say that it's more like a savanna. There are lots of high-rise buildings, a few skyscrapers but also many low-rise buildings intermingled and around the periphery. Beijing is such a transitional space now – lots of the old is being pulled down to be replaced with the new and modern.

Large boulevards criss-cross the city in a manner of which Baron Haussmann would have been proud. Certainly it is not as green or as pretty as Paris, though I think Beijing is trying hard.

I don't believe there is a main road in Beijing without some kind of construction going on along it, whether in the form of a building site or of workers fixing pavements. And the skyline is filled with cranes.

Construction is a much more visible process than it is in the UK. When the external cladding is being added, all the scaffolding (which is actually steel not bamboo) and protective green net-like covering is removed, revealing the bare structure. From ground level you can watch the construction workers fixing on the cladding and the materials being hoisted up – a view that is not possible in the UK because of health and safety regulations.

From a pedestrian footbridge in a main Wang Fu Jing shopping district in central Beijing, for example, I could see a huge hole full of reinforcement bars and formwork with steel pipes fixed across holding up basement walls ready for the pour. The pipes, I am told, will be removed later.

In China, construction on internal works also seems to go on late into the night, and on weekends on some sites.

All the roads run basically either north-south or east-west even in the traditional areas, so despite a lack of detailed up-to-date maps you cannot really get lost. Beijing works well because of its four ring roads (actually there are five, but the first one, which

runs around the Forbidden City, doesn't count), wrapped around the city at almost equal distances from each other starting from the edge of the downtown area.

Beijing is getting bigger by the day, and the ring roads make getting from one side of the city to another very negotiable. In fact, it is possible to 'do' the sites – the Summer Palace, the Forbidden City, Tiananmen Square and the Temple of Heaven – in a day, and squash in a visit to a market before it closes. My friend did this with the help of a hire car!

The environmental cost of the ring roads is that there are huge concrete flyovers in many parts of the city, even next to some historic buildings, but I guess development has to take priority here. And to be honest, most buildings are built for function rather than for style or content.

There may be an urban development plan but an overview of how one building stands next to another does not seem to be considered, so in a way the mass of flying concrete roads everywhere is just part of the jigsaw.

On the east and south side of Beijing, where most of the newest developments are concentrated, old is merely replaced by taller, bigger and shinier shopping centres, offices and luxury residential blocks, whose colourful appearance has yet to suffer the impact of sandstorms and pollution.

Historic sites do stand out here as they are well looked after (despite the inches of dust on their brightly painted exteriors), but everything else is rather grey and murky due to the pollution and the preference for fair-faced concrete and tiling.

My impression is that good workmanship doesn't seem to be appreciated here. Getting the job done quickly seems to be valued more highly, and labour is cheap.

Fay Chan is an architect working in Beijing

which pushes the material (and the willing client) that bit further.

The owners of London's Shoreditch Cargo club had loved Fobert's rough, raw use of concrete in the Aveda stores and approached him to design something similar 'but with more texture'.

The resulting interior combined rough concrete walls, cast in situ against chipboard and the smooth, polished hues of concrete cast against cellophane-wrapped shuttering (Fobert's own Ando-esque mistake), set off by white plasterboard.

The Anderson House was a natural progression, in which the concrete is rendered fabric-like, exploiting the fluidity of the material – a quality that Fobert singles out time and again as concrete's greatest selling point.

But Fobert is no one-trick pony, and while he would not rule out doing an entirely concrete house, his buildings work most effectively through contrast, with one material set intelligently and harmoniously against another. He lists black steel, used heavily in the Aveda project and more subtly in his London office, as another favourite, and the practice's latest project, a private house in Primrose Hill, combines timber cladding with an impressive free-standing concrete staircase.

'People are still frightened of concrete,' Fobert notes. 'It has a stigma, an intrinsic "stuck with it" feel. But if clients are brave, the effects on an interior can be amazing.'



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The Concrete Centre

London

A13: A Multi-Disciplinary Exhibition on an Urban Archetype 4 June-25 July. At the Wapping Project, Wapping Wall, E1. Details www.architecturefoundation.org.uk

A Essential Business Management Training for Architects 7, 14, 21 & 28 June, 14.00. A four-part Colander course at Capital Quality, just off Oxford St. Details 020 8771 6445.

The City Looks East Wednesday 9 June, 18.30. Speakers include David Adjaye and Simon Jenkins. At Bloomberg, 39-45 Finsbury Sq, EC2. Details www.architecturefoundation.org.uk

Building Cities for Community & Identity 13-17 June. The 40th International Making Cities Livable Conference at the University of London Notre Dame Centre. Details www.livablecities.org

Alfonso Vegara Wednesday 16 June, 18.30. The UDG's Kevin Lynch Memorial Lecture at The Gallery, 77 Cowcross St, EC1 (020 7250 0892).

John McAslan Wednesday 23 June, 19.00. An Art & Architecture lecture at The Gallery, 70 Cowcross St, EC1. Details Richard Haddock 020 7727 2663.

Creative Spaces Until 27 June. An exhibition at the RIBA, 66 Portland Place, W1. Details 020 7580 5533.

Dominique Perrault Monday 28 June, 18.45. A lecture at the Royal Academy, Piccadilly, W1. Tickets 020 7300 5839.

Shopping in the City Wednesday 30 June. An AJ conference at the RSA, WC2. Details 020 7505 6044 (www.shoppinginthecity.co.uk).

New City Architecture Until 2 July. An exhibition at Finsbury Avenue Square, Broadgate, EC2. Details www.newcityarchitecture.com

Archigram Until 4 July. An exhibition at the Design Museum, Shad Thames, SE1. Details 0870 833 9955.

The Work of Powell and Moya Monday 5 July, 18.30. An RA discussion at the Geological Society, Piccadilly, W1. Tickets 020 7300 5839.

Housing Design Awards 2004 Until 3 September. An exhibition at the RIBA, 66 Portland Place, W1. Details 020 7580 5533.

East

Basic Maintenance of Historic Buildings Thursday 17 June. A course at Cressing Temple, Essex. Details

Pauline Hudspeth 01245 437672.

Ian McKeever Until 4 July. Paintings and drawings at Kettle's Yard, Castle St, Cambridge. Details 01223 352124.

Brick in Eastern England Saturday 10 July. A one-day conference at Cressing Temple, Essex. Details Pauline Hudspeth 01245 437672.



MOOVERS AND SHAKERS

The first London Architecture Biennale takes place from 19-28 June in Clerkenwell. There is a full daily programme of talks, seminars, walks and exhibitions at a number of EC1 venues. The AJ Charette, 'Future Smithfield', is at the Farmiloes Building on Saturday 19th (11.00-17.00) and the AJ Bar, also in the Farmiloes Building, will be open throughout. Biennale participants include Zaha Hadid, FOA, Will Alsop, Rafael Viñoly, Peter Ackroyd and Stephen Bayley. The image above illustrates 'Greening St John Street'. Bookings 0870 247 1207. Programme details www.londonbiennale.org.uk

East Midlands

Hooked on Books: The Library of Sir John Soane Until 30 August. An exhibition at the Lakeside Arts Centre, University Park, Nottingham. Details 0115 846 7777.

North

Newcastle School of Architecture Exhibition 18 June-3 July. At the Globe Gallery, Curtis Mayfield House, Carlisle Sq, Newcastle. Details 0191 222 1666.

Fantasy Architecture Until 3 July. An exhibition at the Northern Gallery for Contemporary Art, City Library, Sunderland. Details 0191 514 1235.

North West

Rhineland: Art from Cologne 12 June-22 August. An exhibition at Tate Liverpool, Albert Dock, Liverpool. Details 0151 702 7400.

Effective Project Management in Practice Tuesday 22 June. A Construction Study Centre course at the Thistle Manchester Airport Hotel, Handforth. Details 0121 434 3337.

Glenn Howells Thursday 24 June, 19.30. A lecture at the Grosvenor Museum, Grosvenor St, Chester. Details Mark Kyffin 0161 236 5667.

Blasting the Future: Vorticism in Britain 1910-1920 Until 25 July. An exhibition at the Whitworth Art Gallery, Oxford Rd, Manchester. Details 0161 275 7450.

South

Peter Aldington's House and Garden Sunday 27 June, 14.00-17.30. Open to the public at Turn End, Townside, Haddenham, Bucks. Details 01844 291383.

Mike Nelson Until 4 July. An architectural installation at Modern Art Oxford, 30 Pembroke St, Oxford. Details 01865 722733.

South East

CABE Urban Design Summer School 13-16 June. At Ashford, Kent. Cost £750. Details 020 7911 5020.

Flint Buildings: History, repair & Restoration Monday 14 June. At the Weald & Downland Open Air Museum. Details 01243 811464.

RIBA CPD Event: Designing for Safety and Crime Prevention Thursday 17 June, 16.00. At Le Meridien Hotel, Gatwick. Details 01892 515878.

Canterbury School of Architecture Show Until 3 July. An exhibition at Ashford Library Gallery, Ashford. Details 01227 817333.

Wessex

Westonbirt Festival of the Garden 2004 From 4 June. At the National Arboretum, Tetbury. Details www.festivalofthegarden.com

OXO Peugeot Design Awards 2003 Until 17 June. An exhibition at the Architecture Centre, Narrow Quay,

Bristol. Details 0117 922 1540.

Getting to Grips with the Planning Process Wednesday 23 June. A Construction Study Centre course at Clifton, Bristol. Details 0121 434 3337.

William Pye / Edmund de Waal Until 5 September. Exhibitions at the New Art Centre, Roche Court, East Winterslow, Salisbury. Details 01980 862244.

West Midlands

Architecture, Folklore & Mythology Tuesday 6 July, 18.30. A lecture by David Heke at the Victoria Hall, Hanley, Stoke-on-Trent. Details Patrick Redmond 01583 373477.

Yorkshire

Some Versions of Light Until 22 June. An exhibition at the Telephone Repeater Station, St Paulinus, Brough Park, Richmond. Details www.someversionsoflight.co.uk

With Hidden Noise Until 8 August. An exhibition at the Henry Moore Institute, 74 the Headrow, Leeds. Details 0113 234 3158.

Scotland

Langlands & Bell at Mount Stuart 13 June-26 September. An installation in William Burges' chapel. Details www.mountstuartart.com

Ben Nicholson and St Ives Until 13 June. An exhibition at the Scottish National Gallery of Modern Art, Edinburgh. Details 0131 624 6200.

Field Trip Until 2 July. An exhibition at The Lighthouse, 11 Mitchell Lane, Glasgow. Details 0141 221 6362.

Wales

The John Hinde Butlin's Photographs Until 13 June. At Ffotogallery, Turner House Gallery, Plymouth Rd, Penarth. Details 029 2070 8870

Getting Ready for Major Changes to the Building Regulations Tuesday 22 June. A Construction Study Centre course at the Jurys Hotel, Cardiff. Details 0121 434 3337.

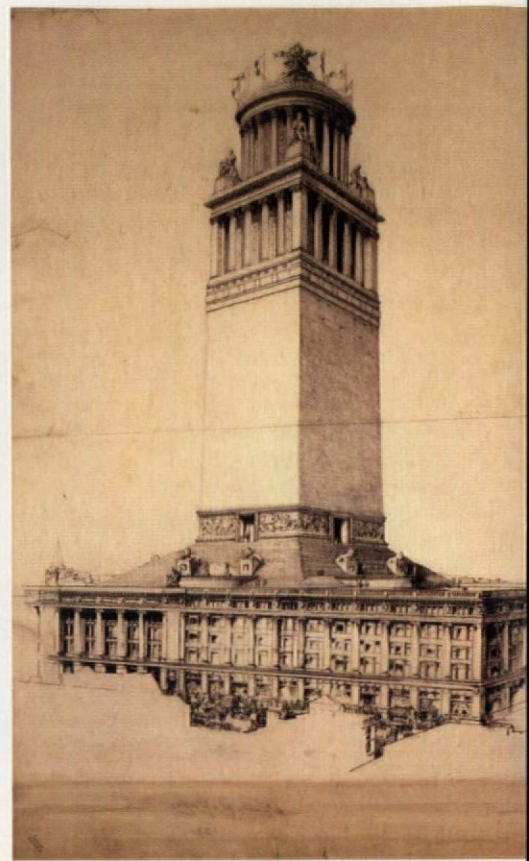
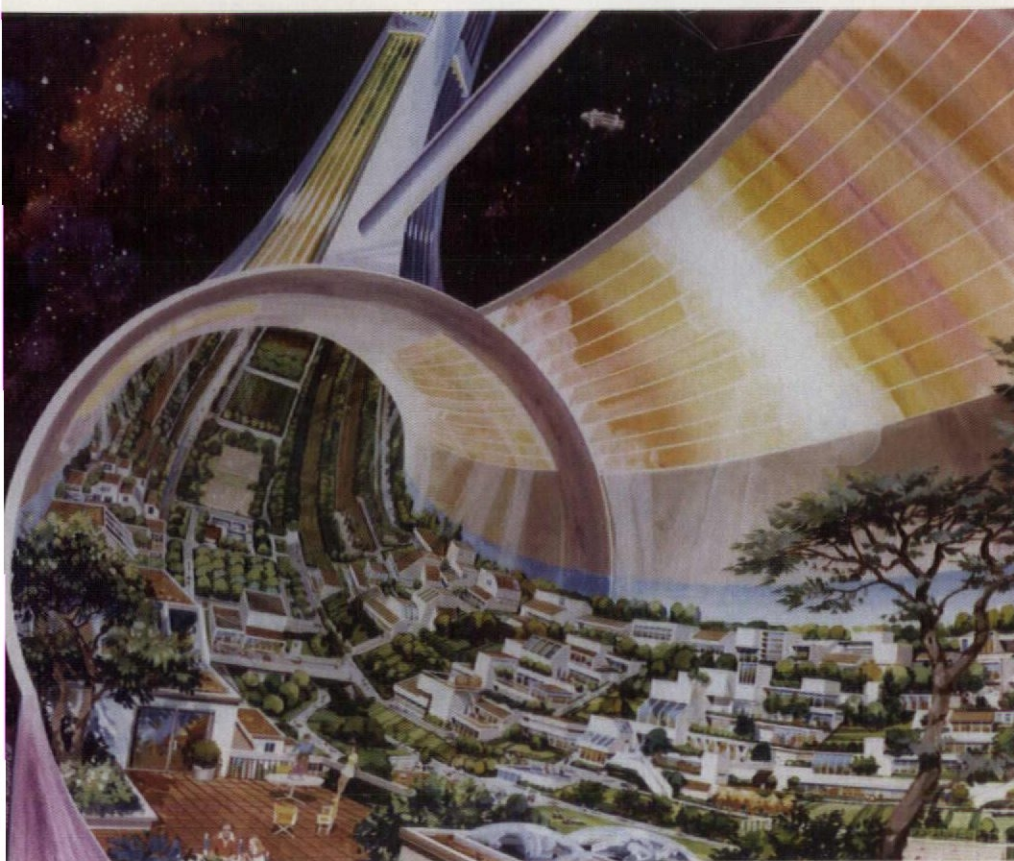
International

Lausanne Jardins 2004 19 June-17 October. Various temporary gardens in and around Lausanne. Details www.lausannejardins.ch

Content: Rem Koolhaas - OMA - AMO Until 29 August. An exhibition at the Kunsthall, Rotterdam. Details www.kunsthall.nl

Jørn Utzon Until 29 August. An exhibition at the Louisiana Museum, Humelbaek, nr Copenhagen. Details www.louisiana.dk

Information for inclusion should be sent to Andrew Mead at The Architects' Journal at least two weeks before publication.



Future imperfect

AUSTIN WILLIAMS

Fantasy Architecture: 1500-2036

At the Northern Gallery for Contemporary Art, Fawcett Street, Sunderland, until 3 July

An architecture exhibition in Sunderland – what will they think of next? Housed in the surprisingly spacious and pristine Northern Gallery for Contemporary Art (otherwise known as the top floor of the City Library on Fawcett Street) the exhibition *'Fantasy Architecture: 1500-2036'* has been organised by the Hayward Gallery in collaboration with the RIBA and is set to tour Salford, Walsall and Preston in the summer.

We're told that, in this show, the word 'fantasy' embraces 'all types of dreaming'. Displays include film stills and computer images but generally are pen or pencil drawings of visionary architecture, primarily relating to unbuilt schemes. Here fantasy architecture has been commissioned simply to impress clients, or with the aspiration to push the boundaries of architectural design. Unfortunately, a grotesque model of Alsop's proposed Fourth Grace in Liverpool seems to be the only realisable project on show.

Borrowing heavily on the RIBA's drawings collection – in itself reason enough for

architects to go and see some of the superb material which is normally resident in London – the exhibition has been curated around a range of themes with titles such as Vertical Expression (towers), Private Worlds (domestic architecture), Megastructures, Appliance of Science, etc.

Such is the breadth of fantasy on offer that it incorporates work ranging from Voysey's wallpaper design *The Dream*, depicting a vision of hell as a 'rejection of his father's Theism', to Ernő Goldfinger's 1942 modern living room 'where the future seems bright and modern despite the war raging at the time'. From Claes Oldenburg's urban intervention shaped like a giant pair of legs (to celebrate the miniskirt), to Boullée's simultaneously impressive and oppressive 1782 drawing for the Metropolitan Cathedral. From NASA's toroidal space colonies to A Byett's 1933 perspective of Holden's vision for the University of London.

However, the incredible diversity of the exhibits meant that after spending an enjoy-

Above left: NASA's *Torroidal Colonies* – a 1970s vision of settlements in space. Above: Philip Armstrong Tilden's tower for Selfridges, 1918

able couple of hours at the gallery – on a Saturday afternoon, unhampered by the 10 or so other visitors – I left wondering what the cohering purpose of the exhibition was. Why 1500? Why 2036? There seems to be no real reason, and the experience remains at the level of a fascinating collection of drawings to fit generic themes.

Maybe that is it. But the Victorian sense of the future was different to Pop Art, while the late Renaissance had different motivations to the inter-war generation, and it would have been good to explore this a bit more, rather than just imply that futuristic architecture of any period conveys the same aspiration. But the captions fail to situate the displays in comparative context.

In the end, it seems that by encouraging the visitor to explore 'designs for buildings that might have changed our lives, or could still do so' the curators are promoting the populist 'what if' school of history. Ultimately this intriguing, well-presented exhibition loses from this arbitrary sense of history.

Keeping it simple

COLIN WARD

Peter Shephard

Edited by Annabel Downs. Landscape Design Trust, 2004. 160pp. £27.50

The subject of this handsomely illustrated monograph was born in 1913 and died in 2002, belonging to that generation of architects who were profoundly affected by the wartime absence of chances to build. He was luckier than most, since his childhood mentor was the great Patrick Abercrombie. Shephard was the son of a hard-up architect living in a cottage on a hill outside Birkenhead, looking across the Mersey to a panorama of Liverpool, and in the other direction to the wildlife of the Wirral, where he spent his childhood exploring and drawing instead of doing games.

In 1937 he applied for a job with Derek Bridgwater, son-in-law of his Liverpool professor Charles Reilly, shifting in 1939 to a 'surreal military world' from which he was lent to the new Ministry of Town & Country Planning. There he worked first on Abercrombie's Greater London Plan, and then on the masterplan for Stevenage, the pioneer of the ring of proposed New Towns around the capital. Falling foul of its bureaucratic procedures, he was relieved to rejoin Bridgwater as a partner in the small private office engaged for years on large public jobs, that became Bridgwater, Shephard and Epstein.

Its work was simple and durable,

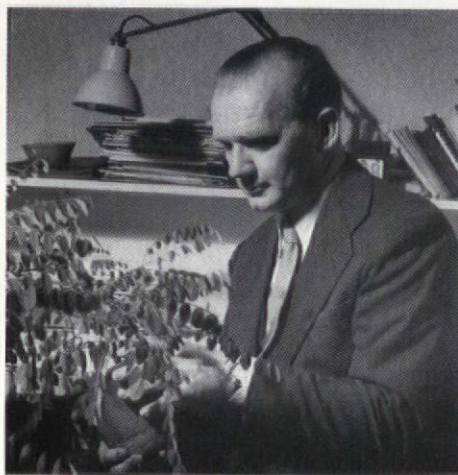
completed on time at something like the contract price. These were qualities that passed unnoticed in a publicity-conscious professional climate that sought originality at any cost. But unlike more celebrated buildings of those years, this work grew old gracefully. Shephard once remarked: 'I'd be happy to stick to lead, wood, brick, stone – understand these and you can't go far wrong. Who needs a bloody great compendium of building materials? Only fools asking for trouble!'

These beliefs were demonstrated in his contribution to the Festival of Britain in 1951. People's favourite memory from the South Bank was often of his moat garden, while for the festival's Live Architecture exhibition at Lansbury, Poplar, Shephard dared to ignore professional

opinion by providing semi-detached houses with hipped roofs and front hedges – still to this day the best-loved part of the estate.

Shephard was a superlative draftsman. His perspectives, whether they were instant sketches in the margins of his assistants' drawing boards, or splendidly finished presentation drawings, were an accurate prediction of the eventual building, but he was far more admired for his chance pencil drawings of plants, birds and women. They filled the borders of the minutes of the innumerable committees on which he sat, as he became an influential president, not only of the RIBA and the Architectural Association, but of the RTPI and the Institute of Landscape Architects.

His landscape work followed a similar set of assumptions to that of his buildings, using a limited range of plants, conscious of their growth patterns,



Know your plants: Peter Shephard

and simplifying at every stage. This volume contains 'before' and 'after' illustrations of his advice, which was to cut out the fussy detail and geometry.

Several of the contributors to this elegant tribute are people drawn to him by his 30 years of teaching at the University of Pennsylvania, and it is useful to compare the approach of Shephard and Epstein to the building of new universities with that of other firms who rejoiced that they could display their genius in individual buildings. Both believed that universities should be located within existing cities. Denied this option, but given the opportunity to develop Lancaster University, they avoided freestanding monuments and built for growth through a series of courtyards and covered ways.

I used to tell Shephard that his simplifying approach reminded me of WR Lethaby, who remarked in 1918: 'We lay out sham splendours of cracked cement and cast-iron around a fountain which holds no water, rather than get a carpenter to set up a strong home-made seat by a space of clean turf or a blossoming tree.' He would smile and ask whether the clients would opt for anything so simple. But this book is a nice reminder that some did.

Colin Ward worked for Bridgwater, Shephard and Epstein for 10 years



Housing at Wandon Road, Chelsea, sketched by Peter Shephard on the margin of Colin Ward's drawing-board in 1968 to explain that the old people's flats would share a common enclosed courtyard with the artists' studios, as they would be the only other tenants at home during the day

Mind reading

ANDREW MEAD

Hooked on Books: The Library of Sir John Soane, 1753-1837

At the Weston Gallery, DH Lawrence Pavilion, University Park, Nottingham, until 30 August

Along with all the casts, models, pictures and antique fragments that he amassed, John Soane was a voracious collector of books – 6,857 of them. Many can be seen in the ground-floor dining room of his house/museum at 13 Lincoln's Inn Fields in London, where they are multiplied in the mirrors. But as the co-curator of this exhibition, Nicholas Savage, explains: 'they began to flow like invisible lava, depositing fragments of his library in underground pockets throughout the house. Sometimes these deposits erupted in outcrops of glazed shelving, but more often they remained hidden behind cupboard doors.'

With those doors briefly opened, a sample of Soane's library is now on show in the unsympathetic setting of Marsh & Grochowski's DH Lawrence Pavilion in Nottingham's University Park. The items are grouped according to 10 themes, and as the alabaster sarcophagus of Seti I is so prominent in the Soane Museum, it is no surprise to find that one of them is Egypt; or, remembering the 'Shakespeare Recess' off the museum's main staircase, that another confirms Soane's devotion to the playwright – there's even the First Folio of 1623, for which he paid £105 at auction.

Logically, too, there are sections that relate directly to the history and practice of architecture. Two editions of Abbé Marc-Antoine Laugier's *Essai sur l'architecture* (rational construction, the primitive hut) are displayed, one French, the other an English translation; but Soane owned 10 copies of this book – some indication of its significance for him.

More unexpected, perhaps, is to find that another of the 10 themes is 'The Black Arts'; the title page of *A System of Magick* promising 'An Historical Account of Mankind's most early Dealing with the Devil; and how the Acquaintance on both Sides first begun'. But such works are not so remote from the Gothic side of Soane, that he indulged in

creating the Monk's Cell in his museum. We duly see Gray's *Elegy in a Country Churchyard* – one of Soane's more conventional purchases, perhaps, but spot-on for someone so preoccupied with mortality. A few artefacts, included to remind us of the books' usual context, add to the morbidity:

a wood and mother-of-pearl cross with a miniature carved skull (a gift to Soane); an ancient Peruvian vessel in the form of an animal carrying a human head.

There are books here which, whatever their contents, Soane must have enjoyed just as objects – among them, William Preston's *Illustrations of Masonry*, with its gilded Masonic symbols on dark blue calf (see left), though as Soane was architect to the United Grand Lodge of England, it was no doubt handy too. Others are open at a gorgeous illustration: clumps of papyrus by a river in John Hayter's *A report upon the Herculanum Manuscripts* (above right); vignettes of Vesuvius erupting – the hand-coloured frontispiece to William Hamilton's *Campi Phlegræi* (right). They tantalise: you want to turn the pages and see what comes next but, of course, you can't.

This is one case where, resources permitting, technology comes to the rescue: at the Whitechapel's 'Mies in Berlin', for instance, you could leaf through *G* magazine on a touch-sensitive screen.

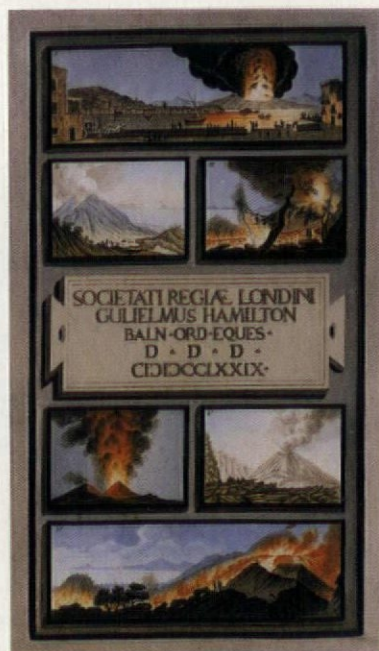
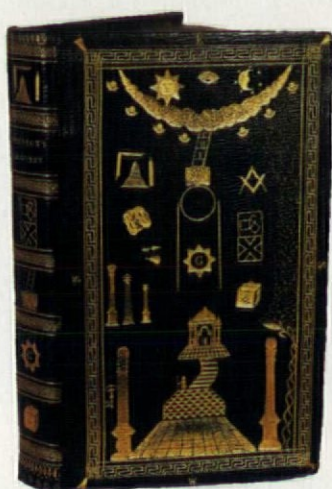
It raises a question that the show doesn't address: what is the evidence of use as well as ownership? which pages did Soane actually turn? With old books bought



at auction, of course, assessing Soane-induced wear-and-tear is difficult, but are there annotations in his hand? One of the most prolific annotators ever was Soane's near-contemporary, Coleridge, whose notes in the margins of other writers' works will themselves fill several huge volumes when they've all been published. In this Nottingham exhibition, though, only one book has such interpolations: a copy of Rousseau's *Confessions*, with a flyleaf sketch by Soane of Rousseau's Ermenonville tomb.

Perhaps the complete catalogue of Soane's library, now being prepared, will clarify this. Not that one should underestimate the effect that even an unopened book

can have for some people, who drift into a creative reverie at just the sight of the spines. Did Soane 'use' some of these volumes in such vague, associative ways? Whether his readings were deep or superficial, however, what this small selection from his library makes clear is Soane's omnivorousness – we glimpse what inspired, haunted or consoled him as, in text and image, he annexed ever more of the world to feed his imagination and emotions. It is fascinating to follow in his wake, which this show lets us do.



Bygone world

ROBERT THORNE

Hampton Court: A Social and Architectural History

By Simon Thurley, Yale University Press, 2003. 450pp. £35

Hampton Court has never had quite the same status in London as Versailles in Paris or the Schonbrunn Palace in Vienna. Partly this is because it has strong rivals, particularly the Tower of London and Greenwich, which seem so much easier to get to – but also because it is immensely difficult to appreciate on a single visit. Apartments, closets and chambers are confusing in their number and layout, and their specific functions are hard to remember. Our present Queen, says Simon Thurley, finds it 'terribly confusing'; a response widely shared by more humble visitors.

This book will not dispel such confusion, though it is admirably written and superbly illustrated. Thurley aims to present the most up-to-date understanding of the history and archaeology of Hampton Court, particularly derived from the research carried out for the restoration following the fire in the Wren apartments of 1986.

He is eager throughout to explain how design was related to use, especially the specialised functions of rooms in which the King or Queen entertained or received emissaries. Much of this is genuinely an exercise in archaeological retrieval – either because the room concerned no longer exists or because its function has subsequently changed. Each explanation is in itself convincing, but multiplied many times over it becomes easy to see why the building is so daunting, even to experts. This is a scholarly, densely-argued study, not a layman's guide.

Having said that, there are certain themes worth ferreting out. The most important of them is Thurley's argument that Hampton Court was an antiquarian exercise almost from the beginning. Cardinal Wolsey, who took a lease on an earlier building in 1515, was a genuine innovator in the works he commissioned, especially the 200ft Long Gallery which stretched into the garden like a seaside pier. But when Henry VIII took over in 1529, the architectural image of a feudal ideal came to the fore. In particular his Great Hall, with its hammerbeam roof,

was, as Thurley puts it, 'a consciously nostalgic structure'. The central hearth was probably seldom used but like the rest of the room it evoked that sense of the chivalric past which Henry wanted to assert. His refurbishment of Wolsey's chapel was meant to have the same effect.

Henry's ideal was adopted by later monarchs, who had equally good reasons for wanting to evoke a dynastic heritage. The feudal setting which he had enjoyed set the tone for the way Hampton Court was presented in the reigns of Charles I and II. Even William and Mary, more normally associated with the demolition of substantial parts of the Tudor palace, used royal portraits to symbolise their historic lineage. So it is

hardly surprising that Hampton Court attracted one of the earliest ventures of the Gothic Revival, when William Kent rebuilt a largely ruinous Tudor range in the 1730s. And of course the Tudor or medieval theme immensely appealed to Victorian restorers, who almost outdid Henry VIII in their loyalty to a bygone world.

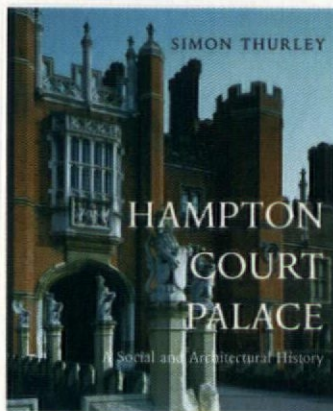
Historians have always shown dutiful

respect towards Wren's work at Hampton Court, while admitting that it is really no match for the French models on which it was based. Thurley is no exception, but enters into an interesting discussion of the relative contributions of Wren, Hawksmoor and William Talman. Wren was a favourite of Queen Mary's but was less admired by William, who was alarmed by a collapse which occurred while the new south range was under construction in 1689. The analysis of this collapse – caused by badly mixed mortar used in cold weather – and the overall discussion of Wren's construction methods, form one of the best parts of the book.

Thurley's other main theme concerns the way in which Hampton Court has been presented to a wider audience. Long before the era of mass tourism, it was accessible to the public, either by tipping the housekeeper or, in the reign of George II, for the spectacle of watching the royal family at dinner. In 1838, when royalty no longer lived there, entrance to the palace was made free and thousands of visitors passed dutifully through its main rooms, looking mainly at the pictures and tapestries. It was a fairly lifeless place, demanding a lot of imagination to appreciate, until the revolution in its finishing and presentation in the 1990s.

Try as he may, Thurley can't absent himself from the final chapter because he was a key player in bringing Hampton Court alive again. Because of his involvement, the book ends on a slightly restrained note, and it lacks a proper conclusion. But until the final pages it provides an exemplary account of an underrated building.

Robert Thorne is a historian at Alan Baxter & Associates



One of the more dramatic episodes in Hampton Court's history – the 1986 fire

people & practices

Lewis & Hickey Architects has appointed **Michael Gallagher** to the executive board, **John Meade** as managing director and **Alistair Wilson** as associate.

Stephen Archer of **Archer Architects** has opened a new studio at Studio 3.07, The Tea Building, Shoreditch High Street, London E1 6JJ.

Barton Willmore has appointed **Lauren Dooley** and **Jennie Hainsworth** as senior planners in its London office.

ECD Architects has appointed **Suzie Baker** as associate director and **Mark Elton** as associate architect.

Design consultancy **MoreySmith** has appointed **Graeme Montague** as director.

Architect **Sprunt** has appointed **Marcel Hendricks** as director.

Stride Treglown has promoted **Sharon Dobson**, **Chris Jones**, **Tamara Jordan**, **Stewart McDowall**, **Clive Tanner**, **Amy Thatcher**, **Simon Trew** and **Alastair Wilson** to associates.

Hazle McCormack Young has celebrated its 20th anniversary and merged with **Pateman and Coupe** of Canterbury.

Regeneration East Midlands (REM) has appointed **Andrew Turner** as chief executive.

Zoo Architects has moved to 62 Albion Street, Glasgow G1 1NY.

Benaim's London office has moved to Dilke House, 1 Malet Street, London WC1E 7JN.

● Send details of changes and appointments to Anna Robertson, *The Architects' Journal*, 151 Rosebery Avenue, London EC1R 4GB, or email anna.robertson@emap.com

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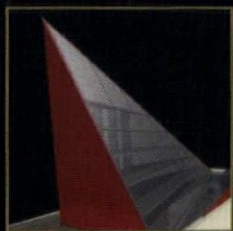




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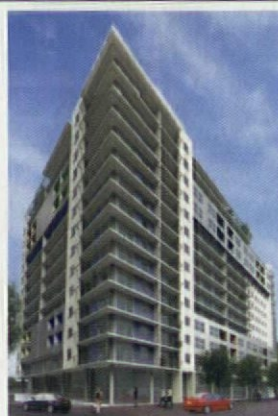
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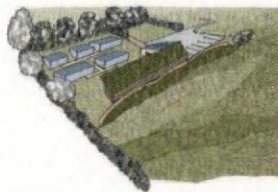
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Architect's Practice seeks RIBA post Part 1 or equivalent assistant, with minimum 2 years practical experience. Must be AutoCad proficient, fluent in English and have good communication skills.

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High Wycombe

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North West London

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Architectural Technician

South East London/Kent

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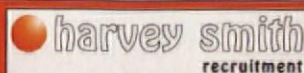
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TENDERS



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APPOINTMENT OF ARCHITECT FOR OUTLINE DESIGN

OJEU Reference: 24718

The London Development Agency (LDA), in conjunction with the other Stakeholders, is launching a competition for Outline Designs for an Olympic Aquatic Centre as an integral part of the wider bid by London 2012 Ltd to host the 2012 Olympic Games and Paralympic Games.

The project will comprise an Aquatic competition configuration to FINA requirements that is capable of hosting the Olympic Games and Paralympic Games, with a reduced size Legacy configuration that will form part of the Lea Valley Regeneration and provide training and competition facilities in accordance with the National Facilities Strategy for Swimming and promoted by Sport England, the Amateur Swimming Association and British Swimming.

The capital budget is circa GBP 70,000,000.

Participants must be able to demonstrate technical competence and experience relevant to a project of this type, size and complexity.

Applicants should complete the pre-qualification questionnaire available from prequal@capita.co.uk, which details the information that will be used to assist in the selection of the short listed architects.

Time limit for receipt of completed questionnaires is 5th July 2004 at 12.00 noon.

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The Scholarship carries a stipend (12 months) of €19,000. On successful conclusion of the research, the holder of the scholarship may be invited to participate in publishing the outcomes in conjunction with the OPW and other Agencies. This phase of the project will have an initial duration of six months with an option of a further six months. Remuneration will be at a rate similar to that paid during the research period.

Further information and application procedures can be obtained from:



The School of Architecture Office,
University College Dublin,
Richview, Clonskeagh, Dublin 14.
Tel: (01) 716 2757; Fax: (01) 283 7778
Email: patricia.oloan@ucd.ie
Website: www.architecture.ucd.ie

Closing date for receipt of completed applications:
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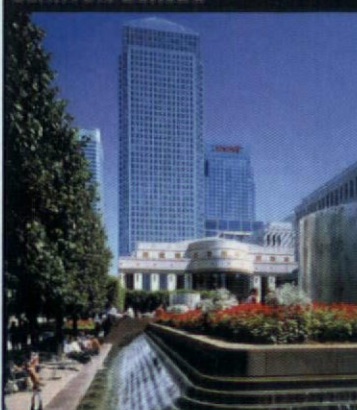
AJ ENQUIRY NO: 301



Taken from Gooding Aluminium's tactile range, Mill Finish Patterned Axis has been used on the interior doors of a lighting showroom. Lined up at 90 degree angles, the ribbed effect reflects light, giving the impression of different textures. Hard wearing and easy to clean, Axis provides a practical and beautiful finish. To find out more visit goodingalum.com

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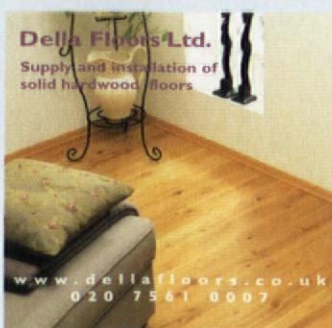
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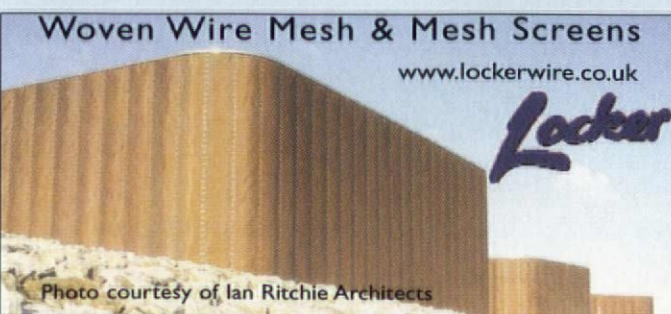
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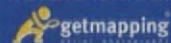
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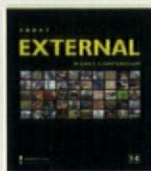
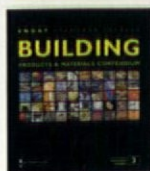
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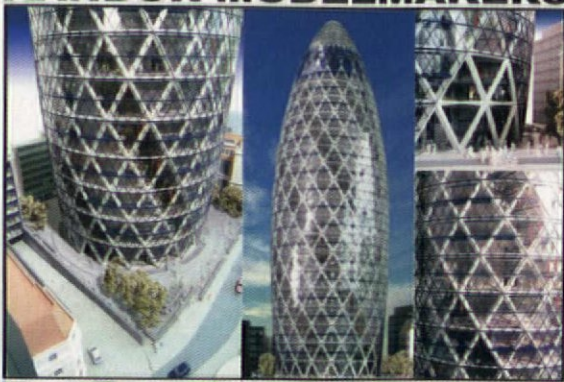
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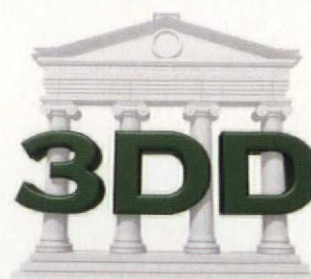
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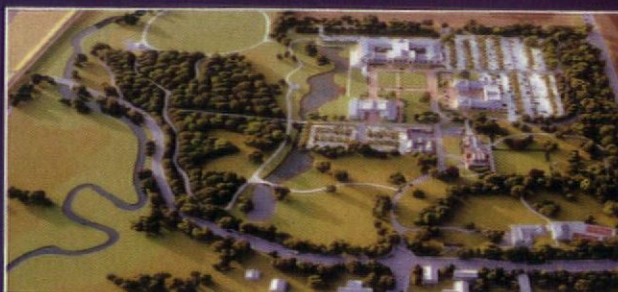
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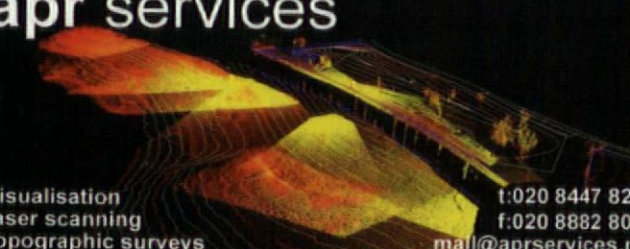
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Modern legacy

And so to the preview of *A Son's Journey*, the excellent film directed by **Nathaniel Kahn**, the child of one of **Louis Kahn's** long-term extra-marital affairs. Aside from its hugely evocative representation's of Kahn's buildings, and perceptive portrait of Kahn's persona and highly unorthodox private life, the film includes interviews with, among others, **Philip Johnson**, **Vincent Scully**, **I M Pei**, **Frank Gehry**, **Moshe Safdie** and **Robert A M Stern**, giving a fascinating insight into a generation of legendary Modern architects. Johnson's assertion that 'Lou' was the most loved of the 'greats' is only marginally undermined by the proviso that 'Frank Lloyd Wright was too cantankerous to love. **Mies van der Rohe**, you couldn't talk to him at all. And **Corbusier** was mean'. But the star turn is undoubtedly the former Philadelphia city planner **Ed Bacon**. Often described as Kahn's nemesis, Bacon quickly reached the conclusion that Kahn's 'special genius' could not be applied to 'the particularities of a problem' and that 'there's not a single shred of any way in which Louis Kahn influenced downtown Philadelphia'; adding: 'It would have been tragedy if any of his ideas had worked. They were all brutal, totally insensitive, totally impractical.'

Trouser press

The RIBA presidential hustings last Thursday were not the most entertaining ever but better than many. Events were, however, livened up by one of the more impetuous architectural hacks who asked the motley crew of assembled candidates what **George Ferguson's** biggest mistake had been so far. While messrs **Pringle**, **Foxell**, **Salisbury** and **Owen** answered with tact and diplomacy, **Richard Saxon** surprised the gathering by claiming that the famous presidential red trousers were something of a problem. The former BDP chief argued that while it was a reasonable

the ones that got away



Astragal's 'The Ones That Got Away' competition features schemes that, for better or worse, stayed on the drawing board. Can you identify this project and its architect? Post your entry, to arrive by first thing Monday morning, to AJ Astragal, 151 Rosebery Avenue, London EC1R 4GB, or fax 020 7505 6701. The first correct entry out of the hat wins a bottle of champagne. Last week's winner (AJ 27.5.04) was Laurie Taylor from Halifax. The never-built scheme was Inigo Jones' design for the completion of the central tower, old St Paul's Cathedral (1608).

gimmick, the trousers often failed to emit the gravitas of the position and portray a serious business attitude to construction. Rather, he said, they exacerbate the image of architects as arty individuals slightly cut off from the rest of the industry. Is the favourite to become the next president wrong? Probably not, in all honesty.

CABE wait

So the long wait for the audit report into CABE's behaviour goes on? There are strong rumours that we might have to wait even longer until after the forthcoming local elections because of purdah. This archaic tradition means civil servants are unable to say anything relating to local government while the campaigns are up and running. However, this has not meant that tongues have stopped wagging. For example, at the end of last week Astragal overheard a group of architects speculating about who might take over from CABE chairman **Stuart Lipton** if the report leaves him in an unfavourable light. One rather frightening possibility was

that of serial-resigner **Peter Mandelson**. 'A laughable possibility,' I hear you cry. Well maybe not. Think about it. He's out of a job. He's a chum of Tony's. He's a recognised aesthete. Its been decided that he is not off to Brussels to become a European commissioner. Why not become a commissioner of a different kind. A CABE commissioner? God forbid.

Cry freedom

What's going on in New York at the moment? There are many rumours emerging that the whole of **Daniel Libeskind's** Freedom Tower development might be shot because of the failed claim by the Twin Towers' site owner, Larry Silverstein. The property magnate wanted the insurance company to shell out twice because nine-eleven 'was two separate terrorist attacks'. Rather unsurprisingly he lost. And simultaneously the funding for architecture's most famous accordionist collapsed. One can only imagine what Danny might do if the work dries up in New York. Come to London and sort

out his plans for the Spiral at the V&A? Pigs might fly.

Sands of time

How do you build a perfect sandcastle? Surely even the most arch-Modernist would accept that there has to be a turret or two. But what does an engineer do when faced with this same question. The answer appears to be, work out an equation for 'how to find the perfect water-sand combination'. According to one boffin from the University of Bournemouth, if there is too much water in the 'cement' the structure is sure to collapse but if there is too little, the castle will blow away. Surely there has to be a better use of the time and resources of Britain's academic researchers? Such as working out an equation for easing global warming.

Write stuff

Apologies to **Gillian Darley** who, on opening last week's AJ, was surprised to see her name at the bottom of a letter which she had not actually penned herself. The missive, a plea for support in the campaign to prevent the venerable St Pancras from being renamed 'London International' was, in fact, a round robin, and Darley simply one of countless signatories. While wholeheartedly backing the sentiment, Darley was less than impressed with the letter's grammatical content, saying: 'When I do write to the AJ, I'll make sure I turn a better phrase!'

(London) pride

The good news is that the campaign appears to have paid off. **Stephen Jordan**, managing director of London and Continental Stations, has apparently confirmed his organisation's commitment to retaining the reference to St Pancras in the new station's name. The bad news is that he does not appear to share Gillian Darley's grasp of grammar. The punchy new moniker is to be (London) St Pancras International, making it the only major international landmark to boast a name which kicks off with a parenthesis.

astragal

SIKA

AJ ENQUIRY NO: 201

The Trocal and VW Golf brands both share a common factor: the new roofing systems are being installed on VW dealerships in the UK. The latest is a roof refurbishment for the dealership in Avondale Road, Bromley, Kent. Trocal S 1.5mm single-ply roofing membranes from market leader Sika were recently specified to waterproof a 200m² flat-roofed extension at the dealership property.



HANSENGROUP

AJ ENQUIRY NO: 202

One of Liverpool's more palatial and striking restaurants makes elegant use of products supplied by HansenGlass in the construction of a feature staircase. The manufacturer supplied 1,100mm-tall balustrade sections and a large quantity of sliding sections, all produced from FortPlus laminated glass. The treads were produced from the ThermoSpan system. For details of HansenGlass products, tel 0151 545 3000 or email sales@hansenglass.co.uk



METSEC

AJ ENQUIRY NO: 203

Metsec Building Products is supplying more than 500,000m² of its site-fix light-gauge galvanised steel framing to the SLAM (single living accommodation modernisation) project to upgrade living accommodation for the Armed Forces. Project SLAM is a £500 million, five-year programme. The first phase will provide 10,000 bed spaces across all ranks and services in 86 projects at 38 sites around the UK.



KALWALL PROJECT OF THE WEEK

AJ ENQUIRY NO: 204

Something a little different to show the versatility of Kalwall is Pfizer's plant in Ireland, where Arup has designed the hydrogenation building to withstand blast using Kalwall to take any side effect. The *Arup Journal* describes the north-facing Kalwall as providing beautiful, crisp natural diffused lighting, which saves on artificial light, and with aluminium panel framing giving an almost 'Japanese tea-house' effect. Tel 020 8660 7667 or visit www.stoakes.co.uk



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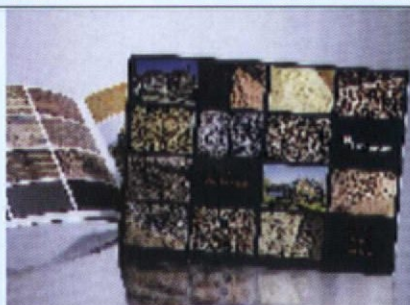
To provide specifiers and contractors with peace of mind, Lafarge Plasterboard has announced the creation of the Cormet brand covering all of the company's metal systems for lining, partition and ceiling applications. Cormet brings together the highest standards of design, innovation, manufacture, quality control and technical support to provide complete fully warranted drywall solutions – metals, boards and accessories.



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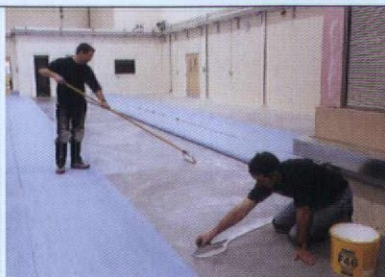
Hanson Building Products has launched a new brochure illustrating an outstanding range of traditional quality stock-facing bricks suitable for a wide range of applications, ranging from new housing and renovation to commercial projects. Of the three main brick types manufactured by Hanson – wirecuts, stocks and flettons – the fashionable brick for homes of distinction remains the traditional stock.



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The installation of vinyl flooring on to a non-absorbent subfloor was made possible by the use of F Ball's Styccobond F46 pressure-sensitive acrylic adhesive, which was recommended to flooring contractors working at Tropical Blinds' manufacturing premises in Sidcup, Kent. Working closely with Freestyle Flooring of West Kingsdown, Kent, F Ball advised using F46 following a visit to the site, which houses an 1,800m² manufacturing facility with a power-floated concrete subfloor.



POTTER & SOAR

AJ ENQUIRY NO: 208

The striking exterior of the new Met Office Headquarters and Operations Centre in the west of England includes six dramatic external stair towers. Providing fire exits for more than 1,000 employees, the towers have been clad with 1,250m² of Medway stainless-steel woven wire architectural mesh from Potter & Soar, the UK's leading manufacturer of architectural wire mesh.



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