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the architects' journal  
151 Rosebery Avenue,  
London EC1R 4GB

**Editorial enquiries**

020 7505 6700

**Editorial fax number**

020 7505 6701

**Email**

firstname.surname@emap.com

**Editor**

Isabel Allen (020 7505 6709)

**News editor**

Ed Dorrell (020 7505 6715)

**Buildings editor**

Barrie Evans (020 7505 8609)

**Technical and practice editor**

Austin Williams (020 7505 6711)

**Working details editor**

Sue Dawson (015242 21692)

**Review and information editor**

Andrew Mead (020 7505 6717)

**Editor, AJ Focus/special projects**

Ruth Slavid (020 7505 6703)

**Assistant editor, AJ Focus/special projects**

Cristina Esposito (020 7505 6716)

**Production editor**

Paul Lindsell (020 7505 6707)

**Sub-editor**

Matt Hill (020 7505 6708)

**Art editor**

Mimesh Parmar (020 7505 6704)

**Assistant art editor**

Sarah Douglas (020 7505 6705)

**Editorial administration**

Angela Newton (020 7505 6700)

Anna Robertson (020 7505 6700)

**Display advertising**

020 7505 6823

**Recruitment advertising**

020 7505 6803/6737

**Advertising fax number**

020 7505 6730

**Account managers**

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Samuel Lau (020 7505 6746)

Katie Deer (020 7505 6743)

**Sales manager**

Malcolm Perryman (020 7505 6698)

**Senior account executive**

Lucy Herdsman (020 7505 6873)

**Account executives**

Nick Roberts (020 7505 6662)

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**Key account manager**

Midge Myatt (tel 01902 851645)

(fax 01902 851603)

**Recruitment**

Charlie Connor (020 7505 6737)

Laurie Shenoda (020 7505 6803)

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**Publishing director**

Jonathan Stock (020 7505 6744)

**Group editorial director**

Paul Finch (020 7505 6702)

**Managing director**

Graham Harman (020 7505 6878)

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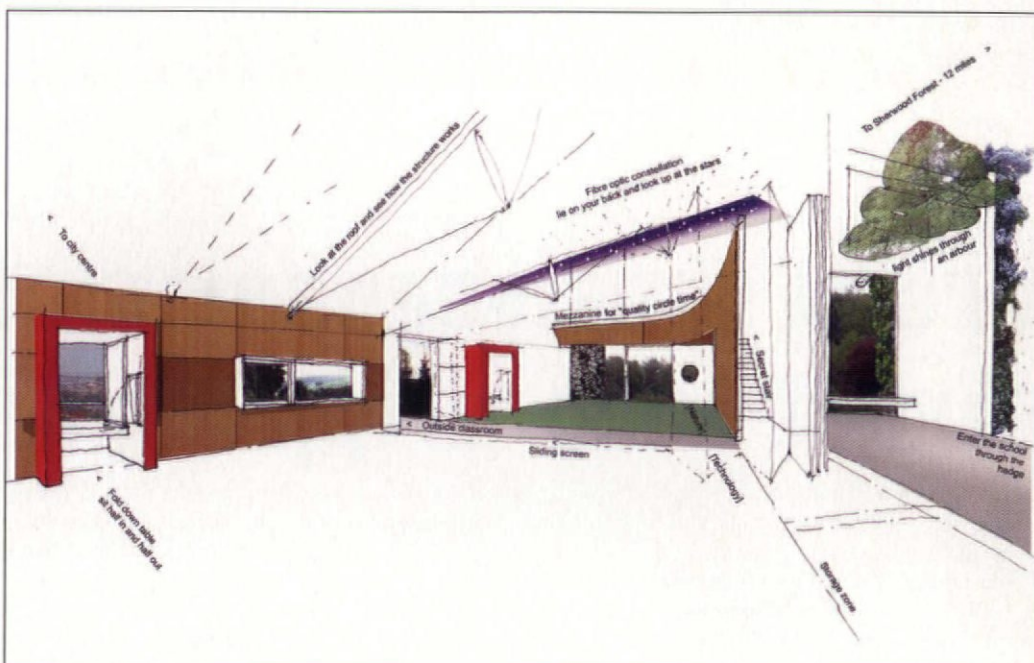
15,205

(July 2002-June 2003)

ISSN 0003 8466

**emap** communications

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This issue charts the progress of 'Classrooms of the Future', the Department for Education and Skills initiative to create environments which will increase morale, facilitate new teaching and learning methods and allow for greater community involvement in schools. Prue Chiles Architects' Ballfield Community Primary School in Sheffield (pictured) is one of five design models featured on pages 26-41.

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At last! Behind that famous facade  
» pages 6-7

“Small country architects are being crippled by the rules”  
Architect Nick Tweddell fights the ARB’s refusal to reduce insurance cover for small practices » page 12

aj news

# Urban renaissance comes under threat from ‘crippling disarray’

A damning new report on regeneration practice has claimed that confusion, complacency and a lack of fresh thinking are crippling the future of the UK’s urban renaissance.

The report, entitled *Towards more Sustainable Places*, has the support of the RICS, and is the result of interviews with a wide spread of practitioners, including the ODPM, regional development agencies and community leaders.

The information was compiled by the University of Aberdeen and highlights serious inadequacies in three key areas: the definition of sustainable communities; miscommunication in partnerships; and the general lack of skills-based training.

The government’s ambitious Sustainable Communities Plan was criticised as being ‘somewhat cloudy’, with little attempt to define its parameters effectively. The report called for practitioners at all levels to prioritise long-term place-making, over ‘narrower immediate goals’.

The findings also said that power inequalities between partners are ‘causing tensions’ detrimental to the future of regeneration. The variable commitment of different partners and an emphasis on results over communication were also branded key failings.

The report found evidence of a shortage of skills in project management, urban design, community engagement and partnership working. However, the main difficulty highlighted was the ‘great deal of confusion, uncertainty and lack of awareness’ relating to the different bodies delivering skills training. Practitioners felt that ‘institutional fragmentation’ in this arena was a significant factor inhibiting regeneration.

This is not the first time regeneration’s infrastructure has come under fire. John Egan’s task group report uncovered similar concerns relating to skills and training last month.

And independent research by the British Urban Regeneration Association, led by Simon Burwood, recognises the multitude of problems highlighted as ‘absolutely pertinent’ to regeneration. ‘Although these findings are welcome and useful, they come as no shock,’ Burwood said. ‘The confusion stems from the overlap of different organisations. We need to rationalise what we have rather than implementing more new schemes.’

However, contrary to the report’s alarming findings of a skills shortage, Burwood claimed that ‘the skills are there, but knowing how to implement them is the problem’.

Cristina Esposito

## A vision of New City Architecture for the capital’s growing skyline



Hayes Davidson has produced this special visualisation of London’s future skyline to mark the opening tomorrow of the New City Architecture exhibition.

Included above are Grimshaw’s Minerva Building, the Richard Rogers Partnership’s Leadenhall Building, KPF’s Heron Tower and

Foster and Partners’ 51 Lime Street. Other schemes in the exhibition will include Alsop Architects’ Puddle Dock office development, Bennetts Associates’ New City Square and Grimshaw’s London Stock Exchange.

The exhibition aims to celebrate ‘how contemporary architecture is transforming the

city’ and will include hundreds of models of modern buildings, towers and public spaces – both proposed and newly completed.

The exhibition will be held in Finsbury Avenue Square in the City of London’s Broadgate from 21 May to 2 July. For further details visit [www.newcityarchitecture.com](http://www.newcityarchitecture.com)





Who's fit to fill  
Ferguson's  
red trousers?  
» pages 18-19

**“We're all brought up on the nature fantasy, but we build our environments out of plastics and cement”**  
Landscape architect Martha Schwartz tells it like it is » pages 22-23

## Ritchie to aid British Museum as the Great Court comes under fire

The British Museum has appointed Ian Ritchie Architects to act as a spatial adviser amid growing concern over the effect Foster and Partners' Great Court has had on the rest of the museum.

The London-based Royal Academician will advise the museum's planning committee on 'enabling the museum to get a fresh perspective on key issues covering both public and behind-the-scenes areas'.

Ritchie said he was excited to be taking on the role, adding that he was pleased to be able to work within Foster's Stirling Prize-shortlisted project.

'The director is rethinking the philosophy of the museum's place in the world and wants me to help him with that,' Ritchie told the AJ. 'There is a need to get an internal strategy for the spaces.'

'Inevitably the Great Court has created certain advantages and disadvantages for the museum that need to be worked through,' he added.

The appointment comes as Foster's immense roof has come under increasing fire from the museum fraternity. The director of the National Portrait Gallery, Charles Saumarez Smith, warned in a recent article in trade magazine *Museum Practice* that the effects of the roof are now being felt.

'When the Great Court opened at the British Museum everyone was overwhelmed by the quality of the architectural experience – the sweep of the roof and the sensational sense of scale.'

'But now I hear more complaints that it sucks the life out of the surrounding galleries,' he wrote.

And the roof has suffered further criticism from other museum experts. 'It doesn't help the



The Stirling Prize-nominated hall has faced criticism

galleries at all,' said Peter Higgins, creative director of Land Design Studio. 'The essence of the museum has not been improved and the experience of visitors has not been enhanced. I especially dislike the cafes squashed into the side of the Great Court.'

However, the British Museum's deputy director, Dawn Eastwick, insisted Ritchie's appointment was part of a bigger review. 'The British Museum is delighted to have Ian Ritchie on board to advise on our space planning. We hope to benefit greatly from his expertise and ideas,' she said.

Ed Dorrell

### DTI CALLS TO GO UNIVERSAL

The Department of Trade and Industry's Sustainable Buildings Task Group has called for the government to adopt a 'Universal Code for Sustainable Building'. The group's recommendations include higher quality standards and tighter regulations for all new buildings in the public sector. +

### CAPITAL'S OLYMPIC BID BOOST

London has made the final shortlist to host the 2012 Olympic Games. A successful bid for the EDAW-led team would generate a massive construction workload and allow regeneration, job creation and additional tax revenues. +

### OWEN CHAMPIONS FUNCTION

Valerie Owen has vowed to champion protection of function in all planning applications to Stage D, if she is elected RIBA president. Owen blames 'staff shortages' for the inefficiency in handling planning applications in the UK. +

### COOPER MEMORIAL SERVICE

Chris Cooper, who helped establish the School of Architecture at North East London Polytechnic (now University of East London), died last week aged 88. A memorial service will be held at All Saints' Church, Woodford Wells, on Friday 21 May at 4pm.

## Aslop-a-like scheme wins Austrian prize

Will Alsop has said he is 'relaxed' at news that a pair of Austrian architects have won a competition with a scheme bearing a strong resemblance to his Stirling Prize-winning Peckham Library.

Dora Aichner and Werner Seidl won the commission for a library in Brunecker, Austria, with a scheme one critic said was as similar to Peckham as a 'pair of eggs'.

'I'm not at all concerned about this and see it more as flattery,' Alsop told the AJ. 'All I can do is wish them the best of luck.'

## 'RIBA moved the goalposts,' slams Godfrey

Presidential candidate Brian Godfrey has accused the RIBA of 'moving the goalposts because I am such a threat'.

The small practitioner from Dorset said he was furious about changes to the election timetable that have left him with 'three weeks for hustings rather than five', due to a booked holiday.

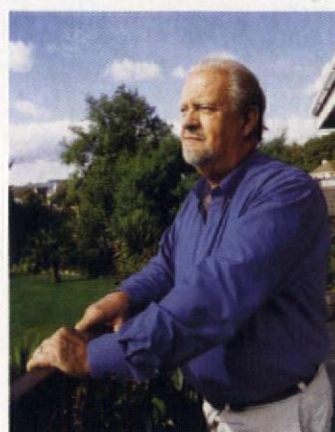
He had requested that the election timing be changed but at a council meeting 'not one of the candidates in council was prepared to back me'.

Godfrey also attacked proced-

ures that forced him to change manifesto statements about the number of elected councillors on RIBA committees.

'I honestly believe the members' interests should be put first, as we are the institute, while the executive comes and goes,' he said. 'I am seen as such a threat, the goalposts are continually changed.'

However, Godfrey's fellow candidates refused to be drawn. 'I want to talk about the positive aspects of the candidacies and not get into criticising the negatives,' Richard Saxon said.



Brian Godfrey: 'such a threat'



# And finally... hooray for Holyrood



KEITH HUNTER

Above: the facade of Enric Miralles' long-awaited and highly controversial Scottish Parliament. The £431 million building – which was viewed by the press for the first time this week – is expected to finally open its doors this autumn





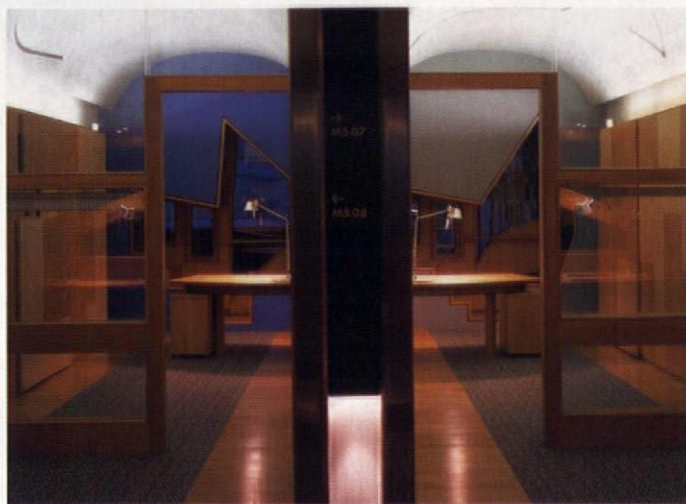
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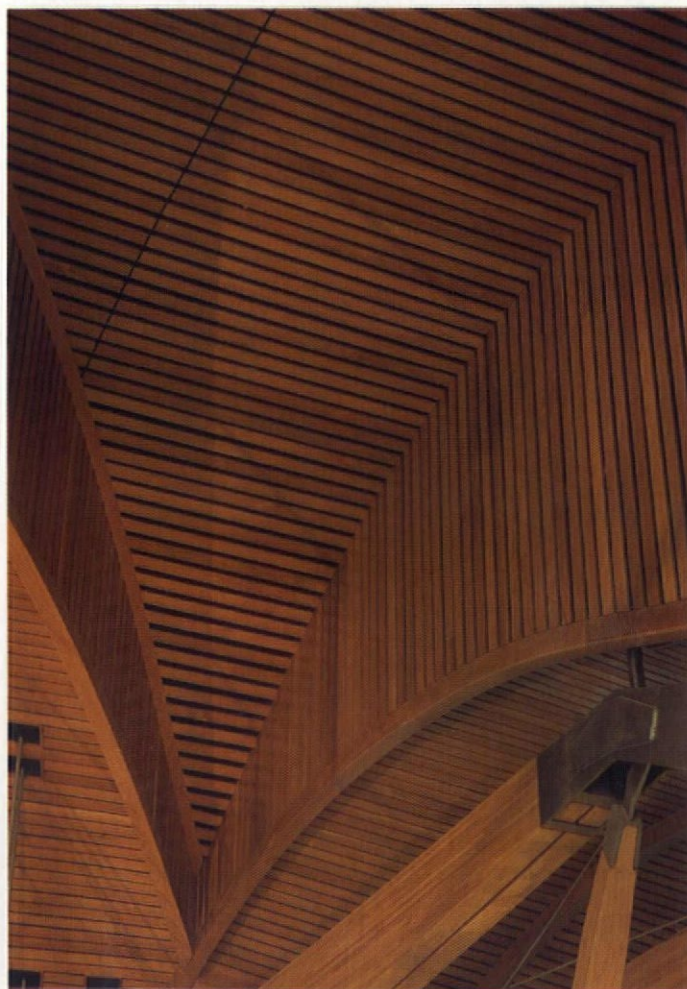
SCOTTISH PARLIAMENT



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**Clockwise from top left: detailing in the debating chamber, a committee room under construction, a pair of MSP's offices and a corridor in the MSP's administrative area. Left: the debating chamber's ceiling**

RMJM and the Scottish authorities finally felt ready this week to open Enric Miralles' parliament building to the press for the first time. The project – which has been mired in controversy since its inception – is scheduled to complete in October this year following years of delays and cost over-runs.

It has become repeatedly embroiled in a series of bitter disputes about its cost – originally estimated at £40 million – which has now reached £431 million and is currently the subject of a Public Inquiry led by former Tory minister Lord Fraser.

The 1.6ha Holyrood site lies at the foot of Edinburgh's historic Royal Mile, next to the Royal Palace of Holyrood House, and sits in the heart of the medieval Old Town.

The design and construction process for the proposed building was started at the beginning of 1998, after controversy over the chosen site. When complete, it will provide accommodation for the 105 Members of the Scottish Parliament, including a 15m<sup>2</sup> office each with space outside for two members of staff.

It will also include a horseshoe-shaped debating chamber, committee rooms, facilities for the public and administrative offices.

The present project architect for the scheme, Benedetta Tagliabue – the widow of Enric Miralles – has remained unmoved by the tidal wave of criticism, predicting that the project will become an icon once the current controversy is forgotten.

Ed Dorrell



# London Eye in £2m-a-month debt

The AJ has learned that Marks Barfield's London Eye, on the South Bank of the River Thames, is accruing a crippling debt of almost £2 million a month, placing the future of the recent addition to the capital's skyline in jeopardy.

Despite attracting more than four million visitors last year, the London Eye Company – comprising co-owners British Airways (BA), the Tussauds Group and Marks Barfield – owes £130 million.

Construction of the Eye was financed primarily through a £40 million loan from BA, which also covered the Eye's massive over-run costs.

Debts are now mounting up as a result of the 25 per cent interest rate that BA levied against the company and, despite the annual £10 million profit, the situation shows no sign of improving.

Designers David Marks and Julia Barfield have publicly called for the Eye



The Eye attracts four million visitors a year

to be refinanced to prevent further financial disputes and to protect the future of the landmark.

The finance problems will come to a head tomorrow (Friday) at a crunch board meeting, where there will be crucial talks on reducing the debt.

A spokesperson for Marks Barfield said that the designers 'did not want to take control' of the refinancing, but would ensure that the initiative was moved up the agenda.

'This process has meant refinancing is David and Julia's priority,' he added. 'BA has been helpful and is keen to cooperate.'

BA was unavailable for comment but a spokesperson for the Tussauds Group was keen to stipulate that 'the objectives of all shareholders are aligned', and that while the Eye is 'absolutely not at risk', the financing arrangement was 'certainly not ideal'.

Cristina Esposito

## ARB triumphs in title abuse case

The ARB has successfully prosecuted a member of the public for misusing the title architect without being registered.

Martin Steen, of Little Chalfont, Buckinghamshire, was found guilty this week of two counts of breaching the Architects Act 1997 at Central Buckinghamshire Magistrates Court. He was fined £200 and ordered to pay £293.75 in costs.

'The level of costs is a little disappointing but we have secured yet another successful outcome in the courts,' a spokesman for the ARB's regulation department said.

'Title abuse is damaging both to the public and to the profession, and we are committed to rooting out those who seek to mislead consumers and undermine the integrity of the profession by unlawfully using the title "architect",' he added.

## Chipperfield set to look tall in Switzerland



Could Chipperfield's entry resemble his 2001 concept proposal for the site of Mies van der Rohe's Friedrichstrasse Office Building project?

David Chipperfield Architects will join six eminent international practices in a competition to design Switzerland's tallest tower.

The London-based practice will face stiff competition from three Swiss firms – Herzog & de Meuron, Burkhardt & Partner and Gigon/Guyer – together with MAP Architectos from Barcelona, Sauerbruch Hutton Architekten from Berlin and Malaysia-based Hamzah & Yeang.

The competition, to design the 125m high-rise offices for Maag Holdings, is a prominent part of Zurich's Maag Site regeneration.

The Maag Tower will accommodate its own 'in-house' railway station and provide a point of entry for the proposed Maag Village – a development of residential studios, shops, and businesses.

Outline designs will be assessed by a jury in September, before being unveiled to the public.

## STUDENT SHOWCASE



Kasif Rashid produced this design for an advertising agency and gallery bar as a third-year project on his BA course at the University of Manchester. The brief was to design an office, partly funded by a public cafe/bar, for an international advertising agency setting up in Manchester's Castlefield district. Rashid's scheme uses a series of curved glue-laminated timber elements as part of the superstructure, with a steel-frame substructure. A double-skin facade allows the building to respond to changes in the external environment. Clear glass tubes fixed to this facade provide solar shading but allow diffused natural light to enter.

Student Showcase is sponsored by Students' Union, a website set up by Union in association with The Architects' Journal at [www.students-union.net](http://www.students-union.net). To submit work for publication in Student Showcase, email a publication quality image to [ajstudentshowcase@emap.com](mailto:ajstudentshowcase@emap.com)





# If you can't trust the Swiss to keep things quiet, who can you trust?

We'd all like silent plumbing and now, with Part E, the government is encouraging it. With the Swiss, of course, it's a religion. To understand why, you should know that most Swiss live in apartments. The last thing they want is to have to listen to the neighbours.



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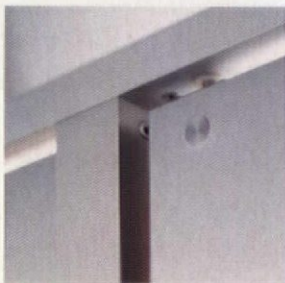
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# ARB rejects calls for insurance cut

The ARB has once again refused to bring in new rules to slash the level of Professional Indemnity Insurance (PII) required from small-scale practices.

During a heated debate at a meeting last Thursday, the board turned down calls for part-timers and semi-professionals to be allowed special dispensation for lower cover.

The ARB ruled that the minimum cover for all registered architects must remain at £250,000.

Architect-member Nick Tweddell – who led the arguments for the special dispensation – argued that architects who earn less than £20,000 a year in fees should be allowed lower levels of cover.

'This was an extremely important part of my manifesto and I believe it is incredibly important that we do something about this now,' he told the meeting. 'I can't believe that we are not going to change the rules.'

'There are small country architects being crippled at the moment by the rules, who have no need for such high levels,' he added. 'I really can't see why there should not be another category for these people.'

Tweddell won the support of Ian Salisbury, a long-term thorn in the

side of the board and candidate in the upcoming RIBA presidential election. 'A general rule such as this leads to a widespread disadvantage for the minority,' he said. 'At the time that the ARB was set up, the government made it clear that it didn't want the board to interfere in PII – but here it is doing it anyway.'

However, the proposals for change were defeated. The board's chairman, Judge Humphrey Lloyd, together with other members, claimed that all architects need the higher level of cover, whatever the scale of the schemes worked on.

And lay member Alan Crane voted against the status quo, urging Lloyd and ARB chief executive Robin Vaughan to 'go for an increase' in minimum cover.

● It has emerged that the Liberal Democrat leader Charles Kennedy has signed up to an Early Day Motion in the House of Commons, calling for the government to abandon the membership extension of the ARB's Professional Conduct Committee. Other signatories include Evan Harris and Menzies Campbell.

Ed Dorrell

## Lasdun's Bradley block threatened by bulldozers



Bradley House in Bethnal Green, London, as viewed from the recently renovated Keeling House

The Twentieth Century Society has discovered plans to demolish Bradley House, a social housing block by Denys Lasdun in Bethnal Green, east London.

The building sits next to the recently renovated Keeling House, which is Grade II\*-listed, and caseworker Cordula Zeidler told the AJ that the threatened block adds to its context.

The local council, the London Borough of Tower Hamlets, this week closed consultation on its demolition proposals, having won planning permission for a replacement scheme some years ago.

Zeidler – who was told of the demolition plans by a local campaign group – hit out at the council's proposals, arguing that the new scheme was simply 'short-termism' and a commitment to 'make a profit from the site'.

'A third building [Connet House] has already gone and it would be a real shame if the second is demolished,' she said. 'What makes it worse is that the replacement scheme is awful.'

Keeling House was renovated in 2000 by the London-based practice Munkenbeck + Marshall Architects.

## Selfridges shelves Foster store plans

Selfridges has admitted it has abandoned Foster and Partners' plans for the wholesale redevelopment of its store on London's Oxford Street. The move follows last year's takeover by Canadian billionaire Galen Weston, who also shelved Foreign Office Architects' plans for a shop in Bristol.

The company announced the overhaul of the northern part of the Oxford Street site in December 2001. Plans included the development of office space alongside a vast retail centre. But Selfridges has now withdrawn its planning application, placing all non-retail development 'on hold'. Instead it will concentrate on expanding the Food and Home departments and redeveloping the hotel.

It also plans to make changes to the department, brand and product mix in its three regional stores – Exchange Square and Trafford Centre, both in Manchester, and the Bullring in Birmingham – during 2004.

A decision on whether Fosters has any future on the Oxford Street scheme is yet to be made.

## Quentin Hughes (1920-2004)

*Seaport* (1964), the masterpiece of architect, academic and historian Quentin Hughes, who died on 8 May, was the most important book on the architecture of Liverpool.

It did more than anything else to alert awareness of the quality of the city and docks when much of it was threatened with demolition. The Albert Dock probably owes its preservation to Hughes' book and his later publication, *Liverpool*.

Hughes' main work – on Renaissance and military architecture – comprised *Fortress: Architecture and Military History in Malta*, *Military*

*Architecture and Gibraltar*. He also wrote about his notable wartime service in the SAS in his book, *Who cares who wins?*

A contemporary of Colin Rowe during his education at Liverpool School of Architecture, Hughes became a teacher at the same institution and was friends with both James Stirling and Dennis Sharp.

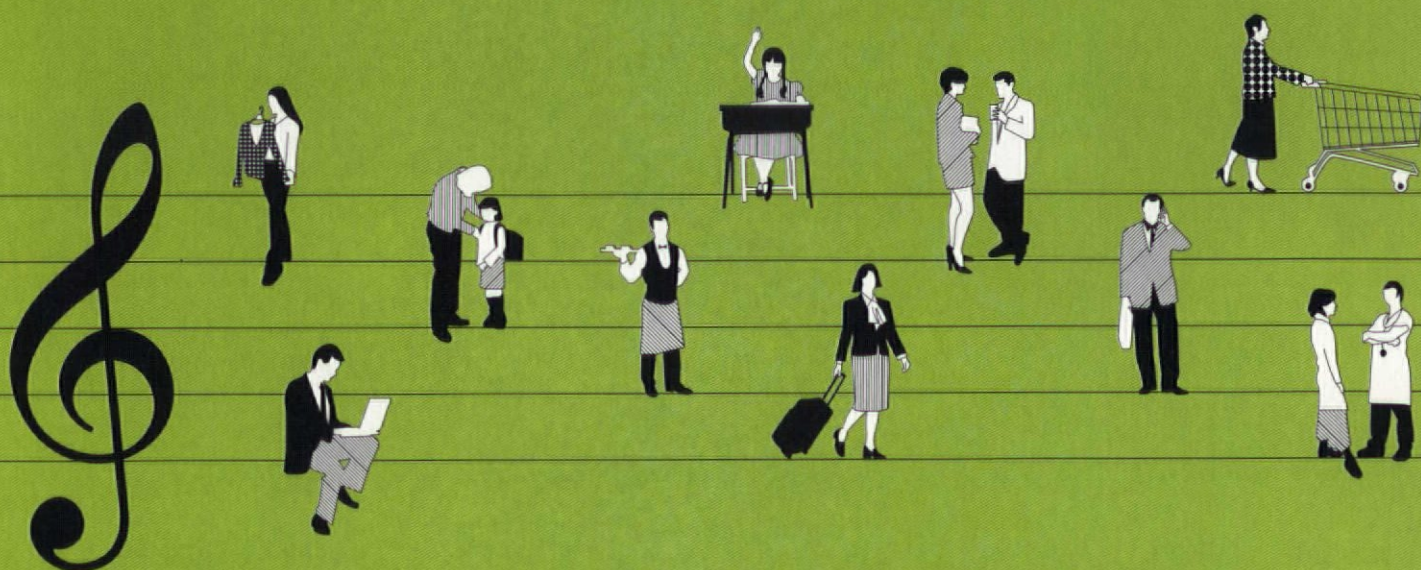
During his retirement he became a leading light in the Liverpool Civic Society and the Liverpool Athenaeum.

Hughes will be missed in Liverpool – and also in Malta, which he loved.

Brian Hatton



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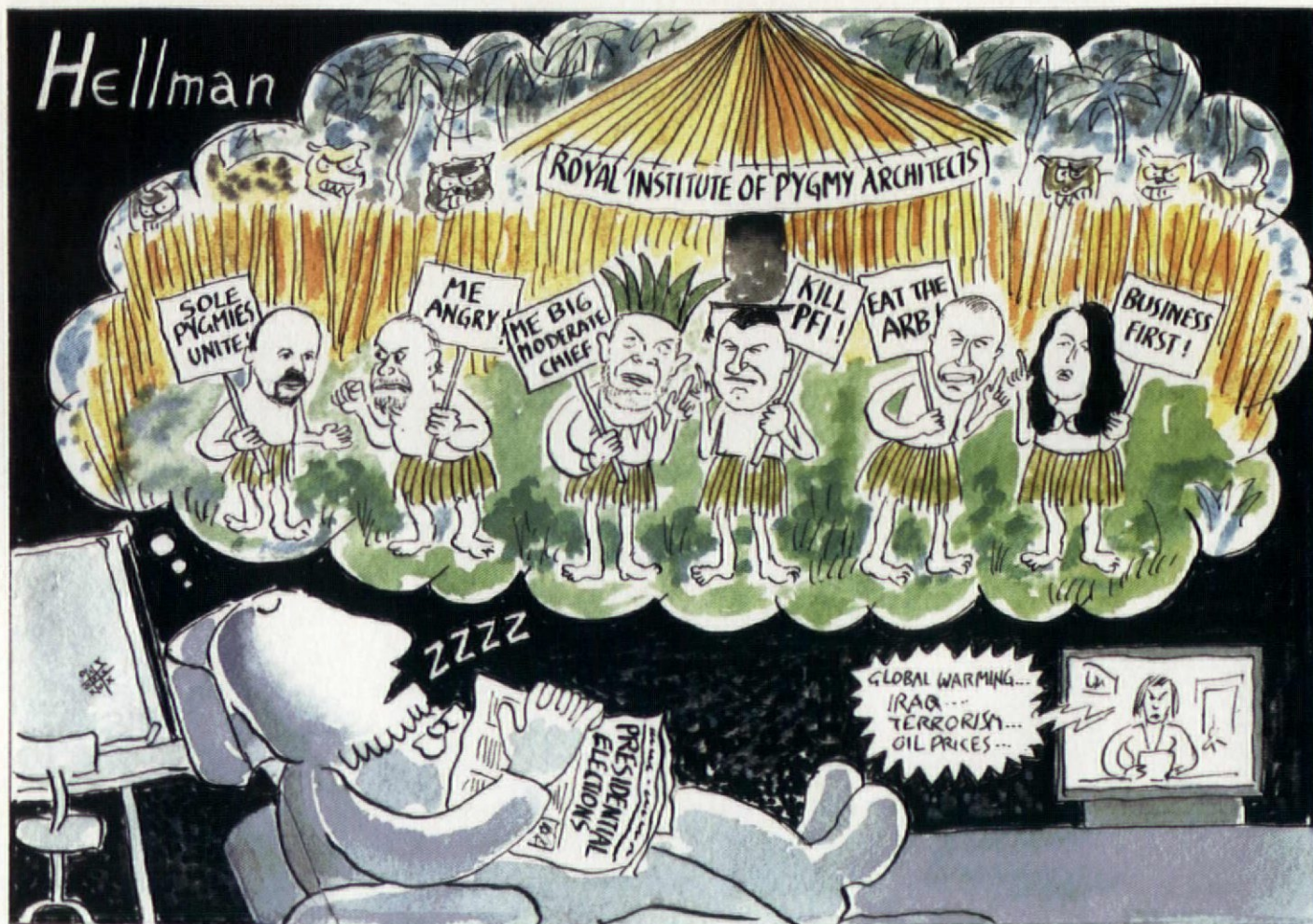
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## who said what

**'If an American city can erect a civic project as brave as this one, the sun hasn't set on the West. In more than 30 years of writing about architecture, this is the most exciting new building it has been my honor to review'**

Herbert Muschamp on Rem Koolhaas' Seattle Central Library. *New York Times*, 16.5.04

**'For much of the mid-80s to late-90s, architectural debate was dominated by a wearying battle of the styles. More subtle distinctions, of the kind that truly encourage good architecture, were lost, and the blame lies squarely with the Prince's crude and ill-informed approach'**

Rowan Moore on the 20th anniversary of Prince Charles' Hampton Court speech. *Evening Standard*, 11.5.04

**'You have to understand, I have a very bad character. I'm a very vindictive person so I still think of him with a certain hatred. I don't think people should have such a free hand with other people's lives'**

Jane Jacobs on New York's post-war planning giant Robert Moses. *New Yorker*, 17.5.04

**'When Gehry pulled the covering off the trophy, it was like someone had tugged the burlap bag off the Elephant Man'**

Mike Ulmer on Frank Gehry's latest design – the World Cup of Hockey trophy. *Toronto Sun*, 13.5.04

## vital statistics

- The RICS has presented new research showing that the boom in house prices is continuing unabated. According to its latest survey, 64 per cent of its members reported prices rose in April, while 31 per cent said they fell and 5 per cent said they were unchanged.
- One bartender or waiter dies every week because of second-hand cigarette smoke, new research by the Royal College of Physicians claimed this week. The study estimated that passive smoking is the cause of at least 49 deaths a year among hospitality workers.
- The number of bankruptcies is set to reach a six-year low in 2005, business advice group BDO Stoy Hayward has predicted. This represents an improvement on the first quarter of this year, when the number of firms going bust rose.
- Only 49 per cent of the owners of Britain's small businesses expect to be able to afford retirement at 65, a new survey by Office World Quarterly has shown. The rest expect to have to keep working well into their late 60s.



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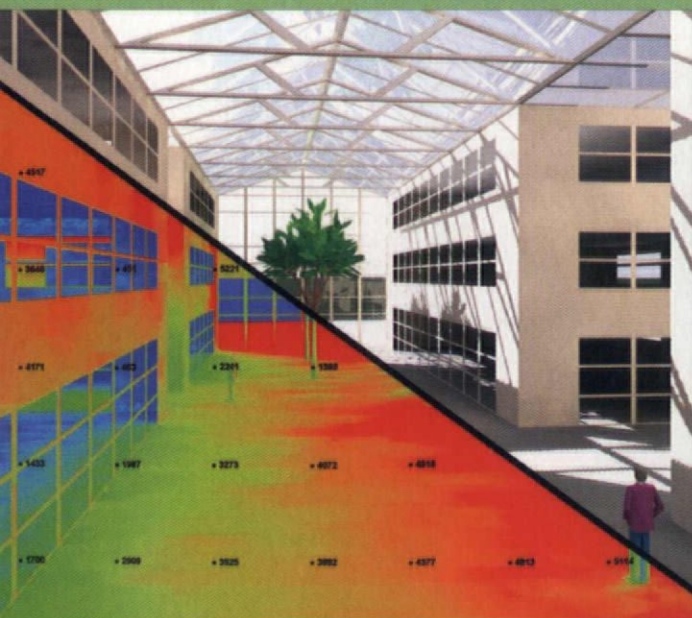
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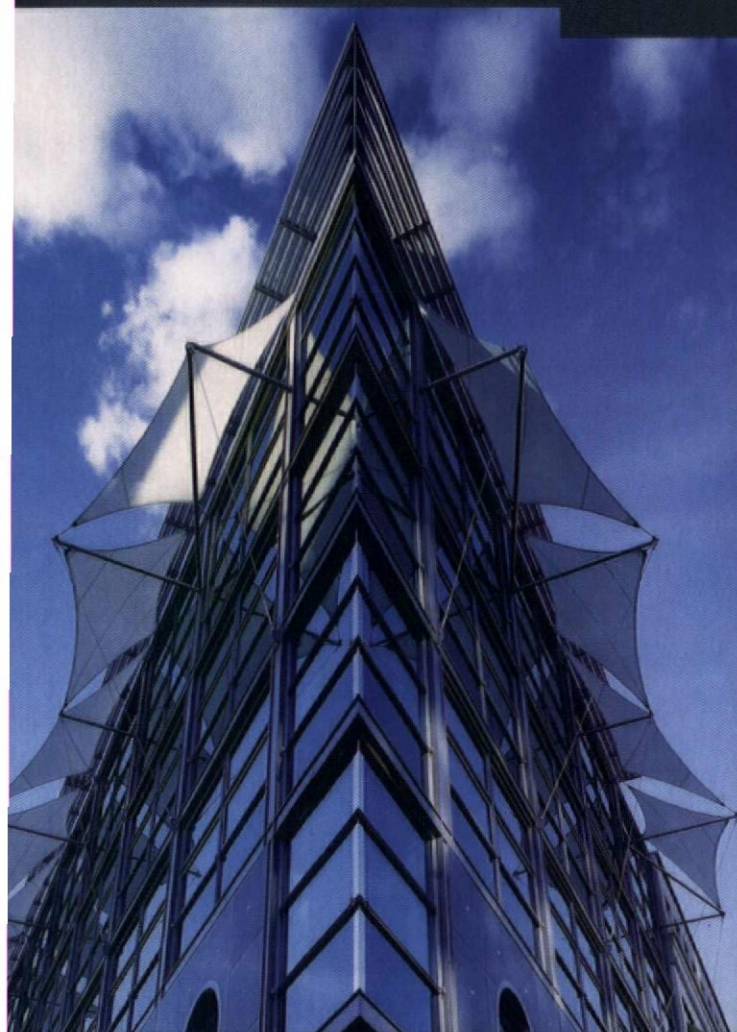


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# Under starter's orders



JONNY HANCOX/HEART

Nominations are now closed in the race to succeed Ol' Red Trousers George Ferguson as the next RIBA president and campaigning is about to begin in earnest. **Ed Dorrell** looks at the widely differing agendas of the six candidates and the issues they believe might fire up the membership



So the race is on. After what seems like an eternity of frenetic manoeuvring, the final line-up is clear. Six candidates will fight it out for the opportunity to take over from George Ferguson and become the next president of the RIBA in 2005. But who are they, and why would they volunteer for a job that requires massive commitment for no remuneration?

There are more candidates this year than in living memory and they come from hugely differing backgrounds. At one end is Simon Foxell, a sole-practitioner working in primary schools; at the other Richard Saxon, the former chairman of Britain's biggest practice, BDP. In between there is an eclectic mob. Ian Salisbury, another sole practitioner and the *bête noir* of the ARB, is standing. So, too, are Brian Godfrey, a veteran who stood in 2000, Jack Pringle, the friend of the educationalists, and business lobbyist Valerie Owen.

### Early favourite

The out and out favourite is Saxon – if only because he is probably the biggest mover and shaker to have stood since Marco Goldschmeid in the late 1990s. There are many in the institute relieved that there is a candidate that can be taken seriously this year. Let's be honest, the days are gone when the likes of Norman Foster or Richard Rogers would consider devoting two years of their jet-setting lives to the RIBA. They are too busy bending the ears of ministers in Westminster.

Saxon is taking a middle-of-the-road path on policy. He has clearly set out to offend as few people as possible, steering away from controversy. He paints himself as a sensible moderate – a safe pair of hands that would do little damage to the profession.

On the issues that seem to matter in this year's race – the Private Finance Initiative and the Architects' Registration Board – Saxon claims to be critical and serious. And yet there is very little that will anger anyone in his campaign literature. Going on previous elections, rather like in national politics, it is the candidate who secures the middle ground and is the most difficult to budge who is likely to win.

However, Saxon has a number of problems with his candidature, mainly revolving around his relationship with BDP. The vast

majority of the institute's membership are sole or small practitioners with no interest whatsoever in the machinations of big London-centric offices. In fact, most of them are downright hostile. They will not easily forget Paul Hyett's famous speech to the 2002 RIBA conference, warning them that the future was bleak for the small practice and informing them that the only way most could continue to exist would be by merging or entering into formal alliances with other small firms.

This is not something most sole practitioners want to hear. Instinctively they are more likely to support one of their brethren, for example Simon Foxell.

Like Saxon, Foxell is manoeuvring to secure the middle ground. The quietly spoken small practitioner from north London has been one of the institute's most loyal servants in the past few years and currently chairs both the Small Practice Committee and the London Region. In 2002, he produced the RIBA's PFI policy document and has also co-written a pamphlet on the future of the profession.

Perhaps Foxell's main problem is that he is so understated. Although clearly bright, he rarely blows his own trumpet and, bizarrely for someone who wants to be president, often seems keen to avoid the limelight.

### Mainstream advantage

The last of the mainstream candidates is current vice-president for education Jack Pringle, a founding partner of the large London practice Pringle Brandon. He has several advantages: although a large firm, his office is relatively low-profile and is unlikely to alienate the very many small practitioners in the same way as Saxon. He is also charismatic and personable. But Pringle's trump card is that he seems to have banged out a series of policies that will differentiate him from the other big-name contenders. He has committed himself to a conflict with the government on the future of the Private Finance Initiative – which he believes is 'damaging for both architects and architecture' – and the ARB, which he argues is acting well beyond its remit.

Beyond this trio, the three other candidates are hard to characterise. The most unusual is Owen. If elected, she would be unlike any president in the institute's history,

and not just because she is a woman. Although an architect, planner and surveyor, she does not practise in any of these fields, instead choosing to head up the business lobby group London First.

Owen has the backing of London Eye architects David Marks and Julia Barfield and can expect support from some of the capital's more commercial architects. However, the success of her campaign – which will inevitably focus on her business credentials – rests on whether she can garner the votes of the silent majority outside London.

Another defender of the mass membership is Brian Godfrey. Gruff and angry, this West Country practitioner would tap into mainstream concerns, such as rejecting the possibility of subs increases unless they are very necessary. He has stood before; a move that sparked widespread discontent among his fellow councillors, many of whom were desperate to see him fail. Godfrey's decision to throw his name in to the ring is bad news for Foxell. As the only runner on the small practice-ticket, either might stand a chance of succeeding Ferguson. But with two, the vote will inevitably be split.

Finally there is Ian Salisbury. If nothing else his candidacy will answer one old question: just how much do ordinary architects care about the actions of the ARB? Salisbury, a former councillor, is keen to paint his campaign as a lot more than just about the ARB, but it is very hard to imagine it as anything more than a one-issue ticket. If the voters decide that they really do hate the board as much as Oxford-based Salisbury believes they do, then he stands a chance, in fact a very good chance. And the ARB will be badly shaken up.

Only one thing is certain in this election, and that is that nothing is certain. But the AJ is sticking its neck out to predict how we see the final outcome in late June.

#### AJ'S ELECTION RESULT PREDICTION

Richard Saxon	1st
Jack Pringle	2nd
Ian Salisbury	3rd
Valerie Owen	4th
Simon Foxell	5th
Brian Godfrey	6th





## Chasing the Bilbao-effect: time to put a tired old myth to rest

Of the many myths which flourished in the fin-de-siècle folly of the past few years, the hallowed Bilbao-effect is perhaps the most absurd. Would our regeneration industry be in quite such a parlous state if it had not spent the past few years concentrating on how to deliver just the type of architectural icon required to trigger a quick-fix cultural and economic makeover? Not only has the phenomenon which launched a thousand pop music centres, cross-stitch museums and indeterminate visitor attractions left a landscape littered with architectural oddities, it has encouraged us to neglect more considered and sustainable development strategies, and lumbered public architecture with untenable expectations.

It is no longer enough to be an ingenious solution to a specific architectural problem, or simply an outstanding public building. Iconic architecture is expected to act as landmark, marketing tool and economic flagship, reinvigorating its immediate surroundings, if not the entire local economy. After the initial euphoria, it appears that even the most unequivocal of millennial success stories cannot live up to the challenge. The British Museum's Great Court stands accused of 'sucking the life out' of the surrounding galleries. With debts of £130 million to its name, even the BA London Eye is not quite the commercial success that it once seemed.

As for the Bilbao Guggenheim itself, it too is struggling to deliver the much-hyped Bilbao effect. Recent reports suggest that the predicted economic regeneration has been decidedly limited in scope, with little real impact on the city as a whole. The situation brings the tale of the apocryphal 1960s rock groupie to mind. When asked about each of her conquests, she would answer: 'He was good. But he wasn't Mick Jagger.' When she finally landed Jagger himself, the verdict was all too predictable: 'He was good, but he wasn't Mick Jagger.' As an example of architectural icon as a trigger for economic regeneration, the Guggenheim carried all the mystique, promise and mythological status of an undisputed icon. But in the cold light of day, the verdict is all too clear: 'It's good. But it's not Bilbao.'

Isabel Allen

## Legal profession shows us to be short-sighted

I read the news of the SCHOSA education rethink (AJ 13.5.04) with much interest. As a history graduate who decided to retrain as an architect, I am particularly aware of the inflexibility of the current arrangements and the disadvantages it places upon both students and the profession. The sanctity of the seven-year system has gone unchallenged in the UK for far too long.

Having briefly studied among a diverse crop of MA students at Sci-ARC in Los Angeles, I can attest to the excellence of non-architectural graduates of all backgrounds in that country. The complacency and short-sighted protectionism that has prevented the UK profession from opening its doors to outsiders is ultimately to its own detriment. As much as we might like to imagine that we are defending some kind of professional 'gold standard', the truth is that far too many of those who slog their way through the British system remain narrowly educated and under-prepared for practice at its end. It is difficult to think of another discipline in which so much time and effort is expended in learning (and, ultimately, earning) so little.

The length and cost of the seven-year programme is already a disincentive to many talented 18-year-olds, but an even bigger barrier to those numerous graduates from other fields who finish their first degree and only then realise that they would like to be an architect. We could do worse than to learn from the legal profession, where an extremely demanding and concentrated one-year conversion course allows the brightest and best from any background to rapidly and affordably transfer their skills. Law's gain is architecture's loss, as we consistently miss out on the opportunity to

expand the depth and breadth of our own profession.

Ben Flatman, via email

## System shake-up calls for urgent priorities

Testing times lie ahead for the Higher Education (HE) sector, not least from the laws of unintended consequences. There is, of course, the working through of higher fees and graduate debt to be managed, which will, however, not produce as much extra cash for the system as is needed.

In this context, UK undergraduates will not contribute as much revenue as postgraduates and students from abroad. The resultant squeeze on undergraduate places for UK students will be reinforced by the forecast growth in the number of overseas entrants, due to the outstanding reputation of British courses and the growth of the middle classes in, for example, China and India (two-thirds of students at the LSE are non-UK already).

On top of this is the proposed 'fair access' regulator, moves to integrate further and higher-education spending, and, intriguingly, the emergence of English language courses open to UK undergraduates in other EU countries (and beyond, where the RIBA recognition system may come into play), with lower fees and cost of living patterns.

Clearly, all this will have significance for architectural education, although it is difficult to predict precisely what, due to the complexity of the situation. However, let us hope reactions do not take the form of yet more strategic review groups, position papers, conferences, futurology, etc. The primary need is to increase flexibility, for which the ingredients exist already, with energy focused otherwise upon two urgent courses of action.

The aim must be to sustain the individual on their path to



initial qualification and thereafter through a system that can adapt for them, whatever their varying financial, personal and professional needs. The RIBA has maintained its own qualifying examinations in architecture and professional practice (the bedrock of the system), operates the profession's validation machinery for courses in academic institutions (here and abroad), and continues to develop its mandatory CPD structure – it thus has the authority, experience and structures to lead a move to greater flexibility in partnership with practices and schools.

Otherwise, the two broad factors that need priority attention are, first, improvement of the support given to part-time students, where the many others currently seeking action on this front should be joined by the RIBA and the schools. Second, the trend that has moved so far towards the HE-focused full-time route since the 1960s will now move back towards greater responsibility once more for the profession itself in the initial formation process (as already is the case with CPD) – here, too, action is needed to galvanise and plan the profession's response.

Out of this will emerge a healthier, more harmonious system, so it is a positive prospect. (And it may turn out that Part 1 becomes the principal full-time component – any retreat from professional validation at that level would be premature and, in any case, unwise.)

*Peter Gibbs-Kennet,  
Bisley, Gloucestershire,*

### **Austrian model leads the way for EU architects**

It seems that your article about the EU expansion (AJ 29.4.04) was misinformed about the study and qualification requirements for architects. I have asked the Austrian Bundeskammer der Architekten und Ingenieurkon-



### **From a breakfast table in the Aegean...**

It seems that Will Alsop's influence is reaching ever more remote corners of the world.

We spotted this Neo-Classical/Neo-Alsop building while working on a project in rural eastern Crete.

*Alistair Barr, Barr Gazetas*

sulanten (the equivalent to the ARB) to clarify the situation. In short, the requirements are: a minimum of five years of university study to obtain the diploma and a minimum of three years of practical experience, followed by a Part 3-type exam. The title 'architect' is protected by law.

All these standards were well in place before joining the EU in 1995. In actual fact, before 1994, five years of practical experience were required before being eligible to take the Part 3 exam. As far as I am aware, Austria has the longest education model for architecture within the EU. Since joining the EU, members can work in Austria as architects without having a Part 3 exam. *Irene Konschill, Format Milton Architects, Alton, Hampshire*

### **Praise for Piers as the Camden case continues**

I am dismayed at the non-factual slanging match going on in your magazine regarding the scheme at Fortune Green, West Hampstead (Letters, AJ 13.5.04).

I am aware of the site, the

immediate environs and the appalling appearance of the current buildings on the site, and also the brilliant proposals by Piers Gough. Anyone visiting the area could not help but agree with me.

There are many benefits of using Gough's proposals, some of which are:

- a hugely improved townscape;
- the residential use provides overlooking and additional security for the park nearby;
- the project would provide buildings of quality and architectural merit.

How is it that neither the planning authority, the council or Hazelle Jackson can see the wood for the trees?

*Nils Westman,  
Okehampton, Devon*

### **Come and feel the UCE buzz in Birmingham**

Yes, the University of Central England in Birmingham is likely to be the university that Phillip Singleton left out when implying that the city only had two universities (AJ 29.4.04). We are the university that hosts the region's

only school of architecture, and I was also disappointed that Rob Annable in his follow-up letter (AJ 6.5.04) should associate us with poor recruitment.

If anyone should want to see for themselves just what has been happening in the Birmingham School of Architecture and Landscape during the past year, then please visit our show at the Arts Cafe in St Martins at the Bullring (opposite 'that' building) from 21-24 June. The school is buzzing with a new energy, and has been greatly strengthened by a healthy relationship with our colleagues in practice.

*Professor Thom Gorst,  
head of the Birmingham School  
of Architecture and Landscape*

### **Foster had a little help from his friends**

'Fostering City quality' (AJ 6.5.04) was a very interesting article. However, I would like to remind you that, although Norman deserves all the compliments on his achievements that are noted in the article, he himself will probably tell you he also owes them to quite a few young architects who had the privilege of working beside him.

They all contributed, in one way or the other, to the success of the practice. Some are still there, others have left to join practices such as Rogers or Grimshaw. Others, like myself, have simply gone out of the architectural world to explore other fields.

*Philippe Fauré, via email  
(worked for Fosters from 1989-92 on the Stansted Airport project, now at the European Space Agency in Paris)*

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](mailto:angela.newton@emap.com) to arrive by 10am on the Monday before publication.





## Beware the housebuilders' new terms of endearment

I wrote last week about how almost every village, town and city is littered with a disastrous series of fringe estates that do nothing but consume vast tracts of land at low densities. They do not offer the benefits of a Letchworth or a Welwyn, of which they purport to be the successors. Indeed, they are not even distant relatives of that great-invented tradition. Instead they inspire another five great inventions of the housebuilders.

The first is the 'link road', the thread that connects these non-places to the existing village or town on which they depend like parasites. Acre upon acre disappears under tarmac, poured like some life-giving elixir.

The second is 'the estate'. To suggest that design is involved in these schemes is nonsense. A series of houses – ideally detached – are squeezed together, yet just apart, around the new road, which acts as a poor memory of a street. Ideally, this road is then twisted around a traffic engineer's muddy splodge, euphemistically entitled a 'green', but instantly recognisable as a roundabout. These dead-end clusters, known in agent speak as culs-de-sac, are then crammed together like some malfunctioning cell system.

The third is 'the forecourt'. If the pavement is not struggling enough, crossovers cut across endlessly with further areas of blacktop or, if you are lucky, cheap interlocking paving, to ensure that the cars can get to the previously mentioned forecourt, and from there into the garage (that most vital of selling tools).

The fourth is 'strip development'. Some kind of new idea about land use and place-making? Not likely. These strips are those useless pieces of land, of varying dimension but no utility, which are cut in half along their

axis, if such a word can be used, by a fence. The role they perform is twofold. The first is to ensure that the term detached, or semi-detached, can be used. The second is the tragic outcome of the stupidity of the first. These strips ensure appalling wall-to-floor ratios and result in windows so small that they can barely ventilate (let alone illuminate) the rooms behind. This desperate condition is only marginally offset by the fact that the rooms are so mean they need little illumination in the first place.

Once inside these dwellings, you begin to understand the idea behind the new community that is being created. People will, of necessity, have to be out a lot, and when they are, it is to be hoped they hone their social skills because these acoustically disastrous cramped boxes demand new levels of tolerance for both family and neighbours. And how are they assisted in developing this skill? By the provision of the fifth invention, 'en suite bathroom at any cost'. Parker Morris space standards – in your dreams.

And where did I see the latest incarnation of depressing non-places, frontier towns all dressed up in an eclectic yet supposedly palatable modern veneer? These non-places, where the ring road becomes the catwalk for the architectural show, and the show itself is a competition for the disguise of the uniformity of tunnel-form construction techniques. I am talking about... Holland!

If the polders are the new model for UK housing provision (and their location in floodplains and government's bland pronouncements suggest they are), we are in real danger of meeting the same dreary wolf, which prowls the same dreary peripheral non-place, in new, only slightly improved clothing.

'These dead-end clusters, known in agent speak as culs-de-sac, are then crammed together like some malfunctioning cell system'

**Designer Martha Schwartz has always provoked awe and anger in equal measure. With a new book on her work already out of date, she shows no sign of slowing down**

Massachusetts-based landscape architect Martha Schwartz is hot property. She is basking in the recent publication of *The Vanguard Landscapes and Gardens of Martha Schwartz* by Thames & Hudson (See Review, page 52), and has set up shop in Britain. Both RIBA and CABE Space enjoyed her pith and passion recently with conference talks, and she is pondering her next move: a new book for Thames & Hudson on the discrepancy between what we feel and do about nature.

Meanwhile, the 53-year-old designer continues to make her mark doing what she does best: designing. If only the publisher had waited before printing, it could have covered much more than the single UK job included in the book, Manchester's Exchange Square. When she is not up to her knees in coalfield regeneration and under the Channel 4 spotlight with BDP at New Fryston near Castleford, Schwartz is brushing herself down for the high-rise glitz of London's Docklands. Her work for Barclays with Pringle Brandon Architects involves a six-storey atrium with giant mobiles dangling over spaces decked with bamboo or themed on the tropics.

Elsewhere, Birmingham's Fort Dunlop warehouse is being Schwartzed in a hotel job with Urban Splash. This involves swatches of smooth grass and cobalt-blue courtyards and is Martha Schwartz to a tee. The bold colours, the edgy forms and the sheer front of a style somewhere between Pop Art and architecture stirs strong feelings.

The woman who gave us gardens with bagels and golden frogs loses none of her design energy on the frequent transatlantic hops to her outpost in north London's Crouch End.

Schwartz sees herself as an artist, having trained in fine art before moving into landscape. 'I'm eclectic, probably falling into the funky Minimalist category, and like Pop Art and the earth artists of the 1960s, like Robert Smithson.' Earth artists were to America what Picasso was to the Spanish Civil War, she insists. 'If Modern artists can make stuff out of junk, so can we. It's our mandate.' And Britain is crying out for this kind of creative junkie. She explains her move to London – along with managing director John Pegg – by saying: 'Britain chose me to work here.'





## Designs for strife

'It seems eager to embrace a more contemporary language of landscape, which is not so much the case in America. I'm a patriot but feel bad about the heavy, dark blanket of conservatism that has cloaked US culture, not just in landscape but in architecture and art. It's not just me who is underused at home.'

'Most of our really talented architects are in the same spot. I'm here because there's a demand. I think British architects are better suited to doing more contemporary work than US counterparts,' adds Schwartz, who lists Nicholas Grimshaw, Alex Lifschutz, and Jean Nouvel among the European architects she particularly admires.

Not that she expects to be greeted with

universal enthusiasm. 'Some people think I suck and that's OK.' To Schwartz, this may just be a matter of British reserve. 'I like being controversial and depend on people being angry with me. I'm angry with them for being hypocritical about nature and settling for the man-made approach with a soothing veneer of nature.'

People who say her work is superficial should look in the mirror, she fires back. They may like what they see less. There are a lot of double standards in the UK and America, she reckons. 'We're all brought up on the nature fantasy, but in reality we build our environments out of plastics and cement, reground stuff and junk because that's the price we give them. Plants are like

'Some people think I suck and that's ok. I like being controversial and depend on people being angry with me. I'm angry with them for being hypocritical'

dogs and children: you have to look after them and that costs money. Some of my budgets work out less than a carpet.'

'Our culture is very risk-averse, very bottom-line oriented and devoid of civic support and strong leadership.' These are not the qualities Schwartz wants to see in her students. The adjunct professor at Harvard – a post she's held for a decade – likes the freedom from market constraints that teaching gives her. The 15 or so employees in the Cambridge studio, which she likens to a research and development firm without the venture capital, strive to push boundaries with materials and details. They do it in the sure knowledge that 'art and commerce are not happy together'.

Her work is guided by a conviction that 'it's crucial to see the environment as we really use it and not in sentimental soft focus'. This may help explain designs that leave people almost speechless with anger as often as awe. Giant concrete cones and zebra crossings at Disneyland and the green snaking benches of Jacob Javits Plaza are 'wry commentaries on the little support landscape receives' in the commercial world, or even art and cultural hot-spots like New York, home to the plaza.

Sentimentality will bring us no closer to solving our urban problems, she insists. And the biggest problem is sprawl. 'You can no longer ignore the nasty places like car centres and strip malls. The UK is one of the most environmentally degraded places. Design of the environment is therefore the most important issue of the 21st century because we are chewing up that environment at an incredible rate.'

Nobody thinks about the aesthetics of sprawl and we need artistic talent and visual thinkers – not for art's sake but for hard-headed environmental reasons, she warns. 'It's the job of artists to honk and horn and make us look at ourselves in a more truthful way.'

Jez Abbott





# A desktop audit uncovers the answers and a whole lot more

A lot of stuff ends up on your desk over 30 years. Everything from a touselled copy of *The Roosevelt Years* to an account in the *International Herald Tribune* of the execution of an American IT contractor in Iraq. Nor does it stop there. There are other books and other cuttings too, hundreds of them – some are bin-filed in a large plastic drum en route to the recycling centre to be cheerfully dumped into landfill, whatever it says on the tin.

Now what is this? A picture of Frank Lloyd Wright outside the AA in Bedford Square. And this? A newspaper cutting about the way that all the new devices for playing compressed digital music have one anachronistic feature: they only have two audio channels, 1950s stereo style. This cutting carries a picture of what looks like a set of headphones for five ears. It will give you hands-free 'surround sound' when you are on the move. Too trivial? Well here's one about the oil crisis.

Apparently all the oil that is 'easy' to recover will run out in about 15 years, but it won't matter because we'll start mopping up the 'hard' stuff from then on. Trouble is, by 2030 there will be more cars registered in China than in the US, and old computers will be mined for the gold, silver, copper, palladium, platinum and other metals left in their carcasses...

While we are on this high-tech note, how about that project for connecting to the Internet by plugging into the mains? Nothing more on this, I'm afraid, as is the case with a potential cancer cure by nanotechnology – 'a thin silica bubble, the surface of which can be customised using a peptide carrier group to selectively target cancer cells, is injected into the patient,' explains the release opaquely.

As for other books, well there is *After the New Economy* by Doug Henwood (New Press 2003), wherefrom we learn that new technology isn't

making everybody rich and famous after all. Instead, 'the distribution of income in the US in the early years of this century is about the most unequal it's ever been'.

So, if not wealth, what? The tale of a typical Tokyo university student takes some beating. She suffers from cellular phone addiction, or 'Keichu', which means that she makes 50 calls a day and is being evicted from her mini-flat because she is behind with her rent. Other students are addicted to emails, sending 300-500 every day until their lines are disconnected and they go into therapy.

Another item catches my eye: 'Home theatre, even better than the real thing'. This recounts the craze for converting your living room into a small cinema and inviting the neighbours in to watch movies. Everybody's doing it, says a Manhattan architect. He quotes US Consumer Electronics Association figures that show 3.1 million packaged systems were sold in 2003, three times as many as in 2000. Is this a bunker manifestation out of 9/11? If so, nobody is quoted as making the connection, but I am sure it is there.

At a more measured pace today's desktop audit ends with news from New Zealand. Apparently the filming of the *Lord of the Rings* trilogy has proved the biggest boost to the country's economy since the Americas Cup five years ago. Only this time everyone has been much more clued up, starting at the top. Even before *The Return of the King* started making its way through cinemas all around the world, the New Zealand government had approved a grants programme intended to attract more big-budget movie-makers to the antipodes. Making the *'Rings* trilogy injected US\$330 million into the New Zealand economy. Maybe the answer to kickstarting urban renewal is not an art gallery

*'Lord of the Rings injected US\$330m into the economy of New Zealand. Maybe the answer to kickstarting urban renewal is not an art gallery but a film'*

making everybody rich and famous after all. Instead, 'the distribution of income in the US in the early years of this century is about the most unequal it's ever been'.

## Ceri Davies

Ushida Findlay Architects

**When and where were you born?**  
1971, Holyhead.

**What is your favourite building and why?**



The Turbine Hall at Tate Modern – one of the few places in London where the scale lets you escape, yet also draws you into watching the peculiarities of humans in motion.

**What is your favourite restaurant/meal?**

Rice 'n' Spice, Stoke Newington, north London – the perfect balti.

**What vehicle(s) do you own?**

Ford Puma and, for one more week, a Moto Morini motorbike.

**What is your favourite film?**

*Finding Nemo*.

**What is your favourite book?**

Any atlas.

**What is your favourite 'design classic'?**

Brionvega TS502 radio designed by Zanuso & Sapper in 1962.

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

Ysbyty Gwynedd, Bangor – a brutal bunker of a hospital presenting the most threatening approach to Anglesey that you could imagine.

**Who or what is your biggest architectural influence and why?**

The freedom of imagination and invigoration you only get from far-flung travel.

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

There's never been just one person and I can't believe there ever will be.

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

An average photographer.

**What would your advice be to architectural students?**

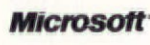
Get educated before you get an ego.

**What would your motto be?**

Tell the truth – but time it well.



Abrocour in association with:



abrocour



# Openhome

## wireless – no strings attached

Through its alliance with leading technology partners, Abrocour provides an exciting wireless home networking service and home entertainment system known as Openhome.

Already architects and housing developers are seeing the advantage of the Openhome solution. It provides home buyers with a 1Mb broadband home network package with a range of smart devices that utilise wireless capability to share data, audio and video around their home.

Openhome can be installed into new homes, regardless of the build stage, and can even be added at completion. With no additional cabling, no disruption and no interference to work schedules, it's completely hassle-free. We do it all; install, train and maintain the service for the home owner.

### The Openhome solution includes the following:

- BT broadband 1Mb connection
- BT Home wireless network and home security system
- Microsoft® Windows® Media Center and 32" flat screen

The great news is that if housing developers sign up now for the Openhome solution before 30th June 2004, we will give each of their customers a Windows Media Center PC for free.\*

\*Subject to terms and conditions

For more information check out our website at [www.abrocour.com](http://www.abrocour.com)

enquiry 6 on card  
[www.ajplus.co.uk/ajdirect](http://www.ajplus.co.uk/ajdirect)

**Openhome**  
Making it a reality



# Classrooms of the future

Over the next 15 pages we explore five design models from the government's nationwide Classrooms of the Future programme, each a different take on the learning environment of tomorrow

By Barrie Evans

For the Department for Education and Skills (DfES), and to some extent the local education authorities too, the Classrooms of the Future programme is about educational benefits. Has pupil attainment or behaviour improved; has school morale and the ability to recruit staff benefited; are new teaching and learning methods being implemented; is there greater community involvement in schools? The buildings are means to educational ends.

To explore the range of design strategies pursued, we have looked at five of the new classrooms in the programme, among the 12 participating education authority areas.

These projects generally go beyond the standard 55m<sup>2</sup> classroom norm, though are mostly just one class space. Sometimes there are two classrooms, especially in primary schools where these can be a year base. These can then be opened up into a single volume, useful both for school and community use.



The only stand-alone building, White Design's student centre for Bournemouth at Hengistbury Head

## CLASSROOM PROGRESS

### BEDFORDSHIRE

Three completed classrooms by Sergison Bates Architects in the Sandy area, each a central space with ancillary accommodation around an external covered area.

### BOURNEMOUTH

The only classroom not on a school site; an interpretation centre at Hengistbury Head by White Design, about to go out to tender.

### CAMDEN

A truly mobile classroom, to be based at one school but to be trucked around the borough. Design, by Gollifer Langston Architects, has restarted after some project organisation problems.

### CORNWALL

Just handed over for fit-out, it encourages students to learn through projects based on space travel and exploration. Located in Camborne, it is by the Design and Maintenance Consultancy of Cornwall County Council.

### DEVON

Three projects: the Chulmleigh community college, and two of its feeder primary schools – Witheridge (p34-35) and Winkleigh, by Gale and Snowden Architects. Winkleigh can be divided in two, and out of school hours becomes a community facility.

### COUNTY DURHAM

Three completed classrooms, at Easington, Escomb and New Seaham, all by Environment and Technical Services at Durham County Council. Easington is a community college that provides neighbouring schools with access to specialist staff and resources. Escomb is a rural primary school with a bias to using IT to connect with the wider community and beyond. New Seaham is an urban primary school providing a learning resource centre and school staff training in the wider area.

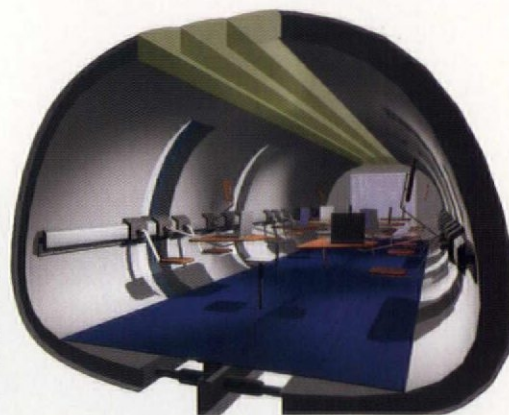


For such wider uses, projects often include kitchenettes or cafes, WCs and extensive storage. Usually these classrooms can be shut off from the rest of the school for stand-alone use.

Some of the classrooms do stand alone, literally, like the Telford project (p36-38). For these, the projects are often focused as much on being national models as fitting into their immediate school. Others, such as the two Sheffield schools (p28-31), are very site-specific, solving layout problems for their schools as well as providing new classrooms. Many are meant as better-class replacements for 'temporary' classrooms.

ICT (information and communication technology) is, of course, a major component, though projects vary a lot about how far to organise the classroom around the possibilities the technologies offer. Some projects focus on immediately workable ICT set-ups while others try more to simulate the ICT future. Some installations are quite complex and it is unclear how community groups will make use of them without support technicians constantly available.

Another consistent theme across projects is sustainability, often using the form and construction of the building as a learning aid.



However, projects vary considerably in how 'future' they are in implementing energy technologies that are not (yet) cost-effective, such as photovoltaics, or technologies that are largely symbolic gestures at single-building scale, most conspicuously aerogenerators. Classrooms geared to the sun need a southerly orientation, which may be difficult to find on an existing site; Chulmleigh (p32-33) smartly sidesteps this.

While the prefabrication chosen by some is a government 'good thing', it remains unclear where the economies of scale will come from that would make it cost-effective. Even with PII contracts bundling several schools together, the volume of work is small-scale to a prefabricator. A county-wide programme of replacing temporary classrooms might be viable.

Architectural quality is not forgotten, of course. All aspire. Some projects, though, have put particular emphasis on making the architecture part of the educational agenda – from the simple, well-made box at Witheridge (p34-35) to creating a particular atmosphere at Ballifield (p30-31).

Eventual monitoring, whether of education or energy, should turn these projects into a useful controlled experiment. In the meantime, look and learn.



Future Systems' design for Richmond, now in the factory. Top: Gollifer Langston's plan for Camden

#### KENSINGTON AND CHELSEA

A striking design by Studio E, the main classroom in a stressed-skin timber pod with steel rib and ETFE conservatory is about to open. A science base, it is planned to include a telescope, chemistry lab and mini-biosphere.

#### MILTON KEYNES

A project of two schools – one of the first to finish, in 2002. By Architecture MK, these are highly prefabricated and potentially relocatable. Large volumes are readily subdivided for school and community use.

#### NORFOLK

Three schools now open, by NPS Property Consultants. Rural location puts an emphasis on outreach. Energy is also a focus, such as the wind turbine at Thurlton and the ground coil (rather than borehole) at Hevingham, which are two primary schools. Hobart High School at Loddon includes video links locally and to European partners in France and Germany.

#### RICHMOND UPON THAMES

Environments intended to excite, the classrooms are GRP pods by Future Systems. The costly demise of one manufacturer has reduced this from a three to two-school project. Currently in the factory.

#### SHEFFIELD

Brunswick (p28-29), Ballifield (p30-31) and Mossbrook are three primary schools. The Mossbrook building is for a school focused on special needs by Sarah Wigglesworth Architects; it awaits completion of fit-out. Set by a lake, it has an environmental education focus. The classroom at Yewlands Secondary School, by Education Design Group, will become the flexible technology centre for this technology college.

#### TELFORD & WREKIN

Two schools take a prefabricated prototype (p36-38).

Information taken from 'Classrooms of the future: innovative designs for schools', the Department for Education and Skills





# Brunswick, Sheffield

A sloping roof for work and play is the most striking feature of Evans Vettori's paired classrooms scheme

Photographs by Martine Hamilton Knight

The framework set out for all four Sheffield projects is a more contextual one than for many, which seek first a role as national models. The framework talks of 'unique and innovative classrooms that will enhance and complement the existing environments'. Of all the classrooms, Brunswick and Ballifield (p30-31) are two of the most site-specific.

They do, of course, have some wider implications as models. For example, both schemes are pairs of classrooms (primary school year bases) that can work as one volume or be subdivided with folding screens, giving the school and community a new size of space. (This flexibility is complemented by wireless laptops.) The new classrooms are linked to the main school yet can be used as an autonomous unit. They are foci for their schools ICT-based teaching, and go beyond simple rectilinear volumes to make experi-

encing the built environment more central to education, creating an atmosphere that draws less sharp lines between work and play.

Most striking at Brunswick is the roof profile. On a school site intentionally open to local people to use, there have been problems of children playing on the existing roofs. The architect's positive response was to draw attention away from these existing roofs by creating a play roof – an inclined plane – to the new classrooms; it appears to be working. The roof is, of course, more than a diversion; it acts as playground space for the school and the wider community, and as a teaching space. Recently a school assembly was held there for 300 students.

Early design ideas were simply for a roof-plane that would sweep up the building. But concerns about its misuse, not least joyriding, have led to a design with a more

restricted entry that can be gated, with the roofspace spreading out to the full building width beyond. During consultation with students and staff, they preferred much of the slope with small steps (terrace-like) rather than a uniform plane, for the possibilities steps offer for sitting and for play. There is also wheelchair access.

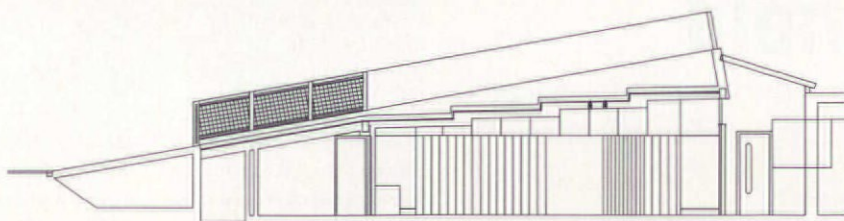
Inside the classrooms the ceiling is in four stepped planes, with integrated artificial lighting. At the lowest point of the room is a low-ceilinged children's retreat. At the opposite end a glazed link space (with new WCs and cloakroom) provides outdoor access to the classrooms and connects to the existing school. The architect had hoped to continue the new openness into the existing building by having folding-partition access off the link to the nearest existing classroom. But fire compartmentation proved problematic. As much fire-resistant glazing as could be afforded is set into this existing classroom wall to provide, at least, significant visual connection.

At first sight the play roof may be thought highly site-specific. But it can also be read as an urban prototype, whether going back to the idea of Corbusier's Unités or, like BDP's Hampden Gurney School (AJ 17.10.02), suited to a multi-storey school on a landlocked site.

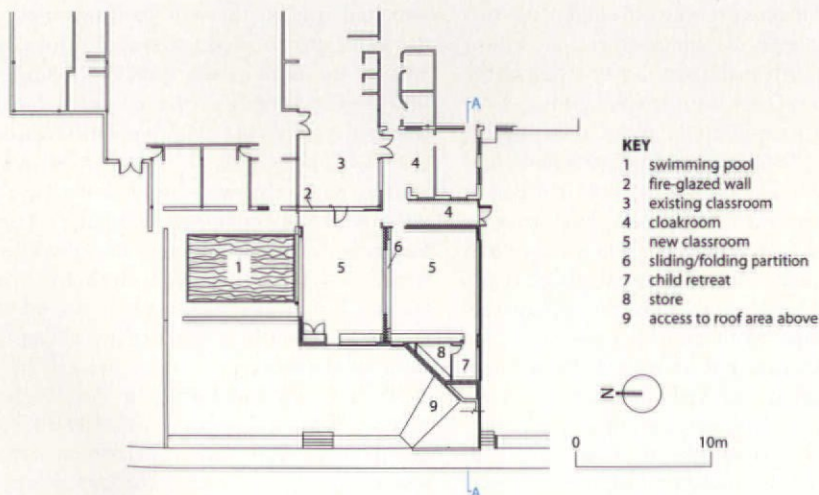




The original idea was a single plane, now gated for control. Opposite: roof continues sweep of site



section aa



ground-floor plan

20 May 2004

## COST SUMMARY

Data based on the tender, for gross external area

	Cost per m <sup>2</sup> (£)	Percentage of total
<b>DEMOLITIONS, SUBSTRUCTURE</b>		
Demolitions, alterations	42.05	2.65
Substructure	114.82	7.23
<b>Group element total</b>	<b>156.87</b>	<b>9.88</b>
<b>SUPERSTRUCTURE</b>		
Frame	143.52	9.04
Roof	246.79	15.55
External walls	85.93	5.41
Windows, external doors	89.36	5.63
Internal walls and partitions	16.47	1.04
Internal doors	36.13	2.28
<b>Group element total</b>	<b>618.21</b>	<b>38.95</b>
<b>INTERNAL FINISHES</b>		
Wall finishes	35.16	2.22
Floor finishes	52.41	3.30
Ceiling finishes	15.23	0.96
<b>Group element total</b>	<b>102.80</b>	<b>6.48</b>
<b>FITTINGS AND FURNITURE</b>	<b>34.49</b>	<b>2.17</b>
<b>SERVICES</b>		
Sanitary appliances	2.52	0.16
Disposal installations	29.04	1.83
Water installations	17.19	1.08
Space heating and air treatment	91.57	5.77
Electrical services	77.86	4.91
Communication installation	24.09	1.52
<b>Group element total</b>	<b>242.27</b>	<b>15.26</b>
<b>EXTERNAL WORKS</b>	<b>65.54</b>	<b>4.13</b>
<b>PRELIMINARIES/INSURANCE</b>	<b>367.16</b>	<b>23.13</b>
<b>TOTAL</b>	<b>1,587.36</b>	<b>100</b>

Data provided by Sheffield Design and Property,  
and Evans Vettori Architects

## CREDITS

<b>TENDER DATE</b>	<b>ENGINEER</b>
June 2002	Sheffield Design and Property
<b>START ON SITE DATE</b>	<b>MAIN CONTRACTOR</b>
August 2002	Kier Sheffield
<b>CONTRACT DURATION</b>	<b>SUBCONTRACTORS</b>
37 weeks	Steelwork Beeley
<b>GROSS EXTERNAL AREA</b>	Fabrications; windows,
155m <sup>2</sup>	rooflights Allied Glazing
<b>FORM OF CONTRACT</b>	Systems; roofing Briggs
JCT 98 Local Authority	Roofing and Cladding;
without Quantities	electrical HE Barnes;
<b>TOTAL COST</b>	mechanical BST; fixed
£246,040	furniture Sangwin
<b>CLIENT</b>	Educational Furniture
Sheffield County Council	<b>SUPPLIERS</b>
<b>ARCHITECT</b>	Rubber safety tiles
Evans Vettori Architects:	Sutcliffe Play; larch
Robert Evans, Colin	cladding Vincent Timber
Cobb, John R Cater	<b>CONTACT</b>
Sheffield Design and	Penny Pennington,
Property:	email:
Sue Williams, Cath Basilio	penny.pennington@
<b>QUANTITY SURVEYOR,</b>	sheffield.gov.uk
<b>STRUCTURAL</b>	
<b>AND SERVICES</b>	





## Ballifield, Sheffield

Prue Chiles Architects' strong but friendly architectural presence reorganises this Sheffield school's entrance

Photographs by Martine Hamilton Knight

For Ballifield Community Primary School, the creation of a new school entrance as part of the project is as important as the two new classrooms. With existing modest-quality buildings, the attractive and evidently new entrance reshapes the approach to the school. It leads in past a reception window directly to the school hall – good for community as well as school functions. And the entrance is made more lobby than corridor-like by its generous width, its bright rooflighting, the display cases of students' work, and by the way the new classrooms' plan is inflected to facet the new wall.

With this entrance and the new WCs adjoining the classrooms, the project is well-integrated with the existing school while being capable of acting as a stand-alone unit. As at Brunswick (p28-29), this is a two-classroom year base, with a sliding/folding partition allowing it to be used as a single volume.

To some extent the architectural treatment argues against a single-volume reading. Two distinct classroom spaces with differently oriented monopitch ceilings meet at a low transition strip on the partition line. Rather, the main layout focus is on smaller groups. Each classroom has a window niche with inward-opening windows, a fold-down desk and seating for four to five small people. The easterly classroom also has a balcony group space, its stair reached through 'secret' doors in the birch ply wall lining. From this room, glazed doors also open directly to the pond and still-maturing landscape, another teaching space.

The busyness and warmth of the architecture is part of the building's message. Prue Chiles' big picture is to see nature and technology working together rather than being opposed. And there are some helpful educational specifics to this, such as the clearly articulated



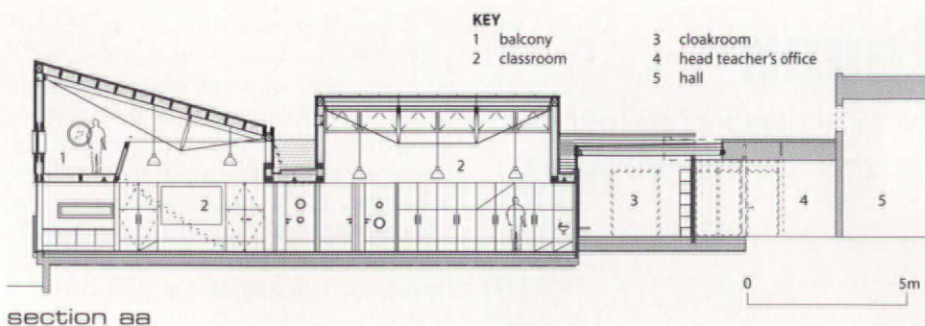
Above: balcony. Top: materials and structure as learning aids. Left: new classroom and entrance

timber and cable roof trusses, the vision panels in the floor showing the underfloor heating manifold, and in the wall showing some of the Warmcell recycled newspaper insulation, and the use of materials, notably the timber, the formaldehyde-free carpets and a highly coloured recycled-plastic-bottle work surface.

ICT has a presence, with 30 wireless laptops and an interactive whiteboard, but here the technology is not planned to be so much in the foreground as it is in several of the other classroom projects – nor is it neglected. The architect has created a service void behind the walling plywood to accommodate cabling for future equipment.

There is a lightheartedness to this design, a message that learning can be fun. The teachers say that the children love the classrooms; they like the difference, they like the materials and they feel special.





section aa



ground-floor plan

20 May 2004

## COST SUMMARY

	Cost per m <sup>2</sup> (£)	Percentage of total
<b>DEMOLITIONS, SUBSTRUCTURE</b>		
Demolitions, alterations	24.90	1.81
Substructure	64.34	4.68
<b>Group element total</b>	<b>89.24</b>	<b>6.49</b>
<b>SUPERSTRUCTURE</b>		
Frame	142.63	10.37
Upper floors	7.86	0.57
Roof	137.53	9.99
Staircases	7.66	0.56
External walls	130.41	9.48
Windows	72.55	5.27
External doors	6.18	0.45
Internal walls and partitions	57.49	4.18
Internal doors	31.05	2.26
<b>Group element total</b>	<b>593.36</b>	<b>43.09</b>
<b>FINISHES</b>		
Wall finishes	12.82	0.93
Floor finishes	57.45	4.17
Ceiling finishes	3.63	0.26
<b>Group element total</b>	<b>73.90</b>	<b>5.37</b>
<b>FITTINGS AND FURNITURE</b>	<b>44.83</b>	<b>3.26</b>
<b>SERVICES</b>		
Sanitary appliances	16.16	1.17
Disposal installations	27.99	2.03
Water installations	24.00	1.74
Space heating and air treatment	64.98	4.72
Electrical installation	65.46	4.76
Lift installation	15.19	1.10
Communications installation	15.00	1.09
<b>Group element total</b>	<b>228.79</b>	<b>16.63</b>
<b>EXTERNAL WORKS</b>	<b>64.35</b>	<b>4.68</b>
<b>PRELIMINARIES</b>	<b>282.68</b>	<b>20.54</b>
<b>TOTAL</b>	<b>1,377.15</b>	<b>100</b>

Cost data provided by Sheffield Design and Project Management

## CREDITS

<b>TENDER DATE</b>	Cathy Dee
August 2002	<b>QUANTITY SURVEYOR,</b>
<b>START ON SITE DATE</b>	<b>STRUCTURAL</b>
October 2002	<b>AND SERVICES</b>
<b>CONTRACT DURATION</b>	<b>ENGINEER</b>
48 weeks	Sheffield Design
<b>GROSS INTERNAL</b>	and Property
<b>FLOOR AREA</b>	<b>MAIN CONTRACTOR</b>
247.7m <sup>2</sup>	Kier Sheffield
<b>CONTRACT</b>	<b>SUBCONTRACTORS</b>
JCT 98, without	Rooflights Vitral/ESB
Quantities,	Services; copper roofing
incorporating sectional	Carlton Building
completion supplement	Services; external works
<b>TOTAL COST</b>	NT Killingley
£340,846	<b>SUPPLIERS</b>
<b>CLIENT</b>	Cellulose insulation
Sheffield City Council	Warmcell; plywood
Education Planning	cladding WISA; windows
and Premises	Velfac
<b>ARCHITECT</b>	<b>CONTACT</b>
Prue Chiles Architects:	Penny Pennington,
Prue Chiles, Howard	email:
Evans, Aidan Hoggard,	penny.pennington
Leo Care, John Edwards,	@sheffield.gov.uk



# Chulmleigh, Devon

Devon Property's more experimental classroom focuses on virtual communities and near-zero carbon emissions

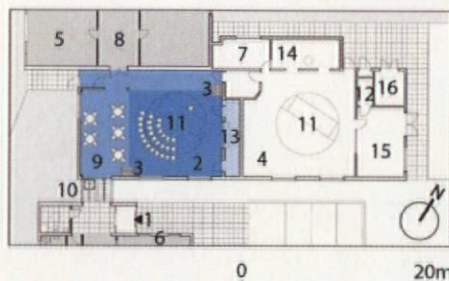
Photographs by Mandy Reynolds

Chulmleigh, as the name may suggest, is a rural village, located in an area of very low population density. Most students arrive at school by feeder bus. So this project focuses on virtual as well as physical communities, an approach also taken by the rural Norfolk Classrooms.

On the ground, this new-build project links the existing school with its library, which, unusually, the school wanted to be seen as one of the community resources. A new entrance between library and classroom both improves access and allows these spaces to be closed off from the rest of the school for stand-alone use.

The classroom is 80m<sup>2</sup> when surrounded on two sides by very high-spec folding acoustic partitions. With these open the space expands to 140m<sup>2</sup>, taking in an adjacent new corridor from the entrance to the rest of the school, and the cafe (yet to be implemented).

With its focus on virtual communities, Chulmleigh Community College has taken the highest available technology route rather than just the next viable step, thinking of the project as a continuing lab for exploring virtual communities. Like the person with the first telephone, establishing virtual communities will take time. In technology, there is an integration of wireless laptops, broadband video links, DVDs, interactive whiteboard, plasma screen



- KEY**
- |                             |                       |
|-----------------------------|-----------------------|
| 1 entrance                  | 9 cafe                |
| 2 classroom of the future   | 10 recessed lift      |
| 3 acoustic partitions       | 11 rooflight over     |
| 4 technology suite          | 12 store              |
| 5 existing two-storey block | 13 IT equipment/store |
| 6 library                   | 14 heat treatment     |
| 7 office                    | 15 preparation        |
| 8 new corridor to school    | 16 plant              |

ground-floor plan

and more. The back-projection to the whiteboard and having laptops that are wireless are examples of architect Devon Property trying to simulate an expected future, in which ICT becomes more pervasive but less obtrusive.

Visually most striking, inside and out, is the large circular turret. It is part of developing a model energy strategy for Devon schools, where the designers have worked with Exeter University. The ambition is near-zero net carbon emissions.

The turret provides north light to the heart of the classroom from one of its slopes, with a 30° south-facing slope covered in photovoltaics (as is a considerable area of the flat roof too). Being circular in plan, the turret can readily be positioned north-south, whatever the building orientation. The team knows, of course, that photovoltaics are not yet cost-effective, but this is an experiment. Rather than using the electricity generated for heating directly, it powers a ground-source heat pump that feeds an under-floor heating/cooling system.

Underfloor systems are slow-response so don't typically deal well with incidental gains from the sun, people and IT. Simulation suggests that running the floor as background heating can be controlled to combine with gains from people and IT to maintain comfort. The insulating effect of carpet is avoided by simply polishing the concrete floor slab. Solar gains are avoided rather than harnessed, with low-level windows for views when seated and higher windows for sky views, which can provide shading electrochromically.

Ventilation is mainly passive, with low-level perimeter inlet grilles and outlets in the turret, which have fan backup. Simulation suggests there would be little benefit in increasing insulation beyond today's Building Regulations standards, or increasing thermal capacity. Framing the building and turret in timber is part of the sustainability agenda, though for the technology suite (funded conventionally) its turret is more cheaply framed in steel.

At Chulmleigh the designers have dared more than most other classrooms. The ideas are clear and expressed in the building for all to see. Intensive monitoring is planned.

## CREDITS

### TENDER DATE

November 2002

### START ON SITE DATE

November 2002

### CONTRACT DURATION

48 weeks

### GROSS INTERNAL AREA

413m<sup>2</sup> (excluding existing building)

### CONTRACT

JCT 1998 Local Authorities, with quantities; negotiated

### TOTAL COST

£1,061,480

### CLIENT

Capital Strategy Team; Education, Arts and Libraries; Devon County Council

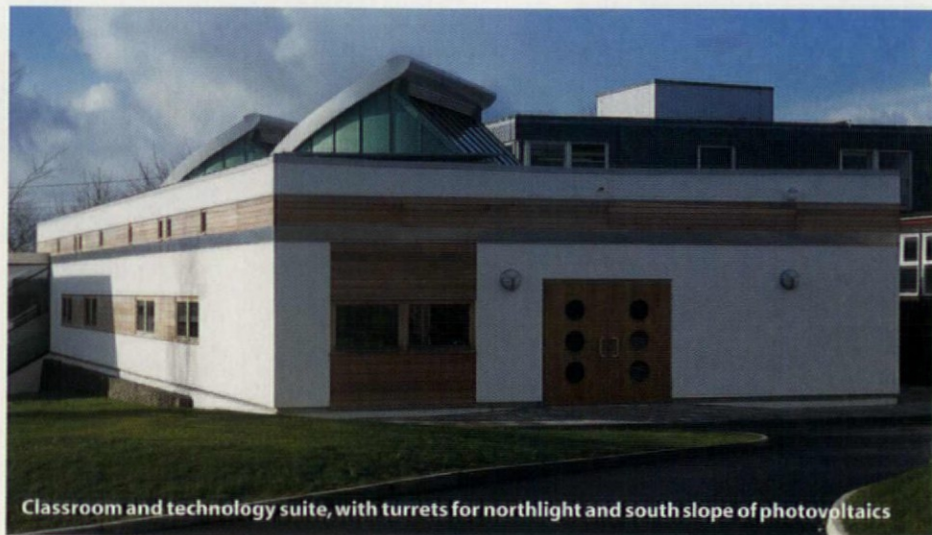
### ARCHITECT

Devon Property, Devon County Council; Alan Cardwell, Kevin Jones, Martin Begbie, Rob Rickey

### QUANTITY SURVEYOR, SERVICES ENGINEERS,

PLANNING SUPERVISOR, CLERK OF WORKS

Devon Property, Devon County Council



Classroom and technology suite, with turrets for northlight and south slope of photovoltaics



North-lit turret  
shapes flexible  
space. Folding  
partition to left



#### STRUCTURAL ENGINEER (TIMBER)

Chiltern Clarke Bond

#### STRUCTURAL ENGINEER (SUBSTRUCTURE)

EDG Structures, Devon County Council

#### SUSTAINABILITY SCIENTIST

Centre for Energy and the Environment,  
Exeter University

#### GENERAL CONTRACTOR

Pearce Construction (Barnstaple)

#### SUBCONTRACTORS AND SUPPLIERS

Frame, timber panels Frame UK; secondary structure  
Finnforest; insulation Warmcell; floor polishing Permobar;  
roof membrane Sarnafil; rooflight Vitra; render Sto;  
photovoltaics PV Facades; acoustic linings Ecophon;  
concealed platform lift Sesame Lifts; electrically obscured  
glass St Gobain; signage MK Designs; underfloor pipes  
Wirsbro; controls SCS; boreholes GeoScience; heat pumps  
Thermal Technology; passive ventilation AAT; audiovisual  
Stage Electrics; lighting Louis Poulsen, Concord; marlin

#### CONTACT

Fiona Colamarino, email: fiona.colamarino@devon.gov.uk

[www.devon.gov.uk/eal/schools/future](http://www.devon.gov.uk/eal/schools/future)

#### COST SUMMARY

Data based on final account, for net internal area

	Item cost per m <sup>2</sup> (£)	Percentage of total
<b>SUBSTRUCTURE</b>	<b>154.58</b>	<b>6.01</b>
<b>SUPERSTRUCTURE</b>		
Frame	190.36	7.41
Roof	149.80	5.83
Rooflights	29.15	1.13
Staircases	20.31	0.79
External walls	111.47	4.34
Windows	58.01	2.26
External doors	32.52	1.26
Internal walls and partitions	82.71	3.22
Internal doors	48.02	1.87
<b>Group element total</b>	<b>722.35</b>	<b>28.11</b>
<b>INTERNAL FINISHES</b>		
Wall finishes	23.69	0.92
Floor finishes	52.06	2.02

Ceiling finishes	36.09	1.40
<b>Group element total</b>	<b>111.84</b>	<b>4.34</b>
<b>FITTINGS AND FURNITURE</b>	<b>44.91</b>	<b>1.75</b>
<b>SERVICES</b>		
Sanitary appliances	4.89	0.19
Services equipment, disposal installations	6.63	0.26
Mechanical installations	365.62	14.23
Electrical, protective, communications	544.18	21.17
Lift and conveyor installations	84.45	3.29
Builders' work in connection	25.01	0.97
<b>Group element total</b>	<b>1,030.78</b>	<b>40.11</b>
<b>EXTERNAL WORKS</b>	<b>181.59</b>	<b>7.07</b>
<b>WORKS TO EXISTING BUILDING</b>	<b>92.40</b>	<b>3.59</b>
<b>PRELIMINARIES/INSURANCE</b>	<b>231.72</b>	<b>9.02</b>
<b>TOTAL</b>	<b>2,570.17</b>	<b>100.00</b>

Cost data provided by Martin Jury, Mildred, Howells & Co,  
working with Devon Property





Rainscreen timber-clad classroom with outdoor teaching space. Below: welcoming the sun



## Witheridge, Devon

The Designers Collaborative has produced an elegant box for this primary school, providing an effective yet simple response to changing needs

Photography by Mandy Reynolds



Though Witheridge is a feeder school for Chulmleigh (p32-33), the experimental approach there is replaced at Witheridge by a more simple one, more focused on creating an immediately usable, refined piece of architecture. As architect Michael Wigginton said to the contractor, he wanted the building to look as carefully made when viewed from a distance of 1m as when seen as a whole from 20m or more.

The project extends the 1965 timber framed and clad primary school, fitting-in in form and materials, tidying up the connection of old and new. The new classroom is located at the south end of an existing arm, which has advantages.

Being an internal dead end, the 24m<sup>2</sup> space immediately outside the classroom doubles as lobby and wet space. And the north wall of the class space looking onto this can be largely glazed without concern about distraction from passers-by, while improving daylight evenness in the classroom.

East and west walls are kept solid, with the potential for further classrooms to be attached either side. This leaves the south side open to the sun. Again, in contrast to Chulmleigh, where direct sunlight is largely excluded as a too-variable nuisance for convenience of energy management, Wigginton wants to embrace the sun as part of life's natural animation.

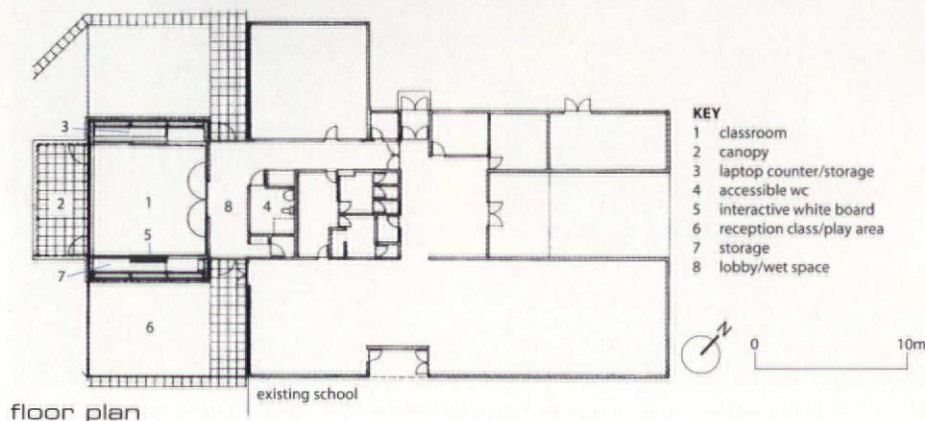
There have to be solar controls of course, for glare and overheating. The glazed south wall has both internal louvre blinds and, outside, a teaching space with motorised roller blinds beneath its sloped glass roof. These blinds are the first line of solar defence, controlled via a combination of internal thermostat and external solar cell. Computer simulation suggests that, with this protected south wall, the north wall glazing and a 7.2 x 1.2m rooflight toward the north side, artificial lighting should never be needed during the school day to meet the 300 lux requirement.

However, on a bright day when I was there, the louvre and skylight blinds were closed and the lights were on during a succession of classes using laptops and an interactive whiteboard. Initially it looked gloomy inside, but the eye is very accommodating. Especially for IT-based teaching, there may be questions about the assumptions on user behaviour built into such computer software. Monitoring should tell.

If energy consumption were to go to plan, the prediction is of 25 per cent of the consumption of a Building Regulations classroom. Other energy measures at Witheridge include 150mm of insulation to walls and roof. Heating is underfloor electric: extending the existing wet system was costly and would have made monitoring difficult.

Timber rainscreen cladding echoes the boarding of the existing school. Red Cedar was rejected as too soft. Samples of Siberian and European Larch had too many knots and shakes. Fortunately the timber supplier managed to acquire a load of second-hand Iroko. South window frames and doors are also Iroko. The elegant canopy is framed in 75mm CHS and tension cables. Given maintenance budgets, its glass roof, and the rooflight, have wisely been given a finish (Ritec) to inhibit dirt build-up, which after six months can be seen to be working. The canopy is relatively expensive (£27,380), so might not survive in this form if the classroom was rolled out across the county.

More widely applicable is the basic idea of the simple box with outdoor covered space. Its square plan follows staff preferences for flexible accommodation. There is significant storage (16m<sup>2</sup>, including a computer bench) which allows some switching of furniture and equipment between uses. And while it has some clever control automation, there are also manual overrides. There is a lot to be said for keeping it simple and legible.



## COST SUMMARY

Tender price data for net internal areas. This includes the classroom, external works and drainage, but excludes canopy, lobby/wet space, accessible WC and related circulation, minor general items and external works

	Cost per m <sup>2</sup> (£)	Percentage of total
<b>SUBSTRUCTURE</b>	<b>98</b>	<b>5.77</b>
<b>SUPERSTRUCTURE</b>		
Frame	83	4.91
Roof	193	11.39
External walls	186	10.99
Windows, external doors	101	5.95
Internal walls, partitions	5	0.32
Internal doors	93	5.49
<b>Group element total</b>	<b>661</b>	<b>39.07</b>
<b>INTERNAL FINISHES</b>		
Wall finishes	14	0.84
Floor finishes	54	3.19
Ceiling finishes	39	2.28
<b>Group element total</b>	<b>107</b>	<b>6.32</b>
<b>FITTINGS AND FURNITURE</b>	<b>65</b>	<b>3.83</b>
<b>SERVICES</b>		
Disposal installations	8	0.46
Electrical installation	167	9.84
Builder's work in connection	6	0.34
<b>Group element total</b>	<b>181</b>	<b>10.64</b>
<b>EXTERNAL WORKS</b>		
Roads, paving	229	13.51
Landscaping	24	1.41
Drainage	48	2.85
<b>Group element total</b>	<b>301</b>	<b>17.77</b>
<b>PRELIMINARIES</b>	<b>296</b>	<b>16.59</b>
<b>TOTAL</b>	<b>1,694</b>	<b>100</b>

Cost data supplied by Davis Langdon & Everest

## CREDITS

### START ON SITE DATE

December 2002

### PRACTICAL COMPLETION

September 2003

### TOTAL COST

Approx £225,000 (anticipated final account)

### AREA

Class space plus storage/computer area 69m<sup>2</sup>  
(net internal area)

### CLIENT

Devon County Council Education Arts and Libraries  
Directorate

### ARCHITECT

The Designers Cooperative: Michael Wigginton

### QUANTITY SURVEYOR

Davis Langdon and Everest

### STRUCTURAL AND ENVIRONMENTAL ENGINEER

Buro Happold

### MAIN CONTRACTOR

Pearce Construction (Barnstaple)

### SUPPLIERS

Steelwork WM Ironwork; canopy, roof glazing Solaglas  
(South Wales); blinds Deans Blinds and Awnings UK;  
ceilings Ecophon; lighting Zumtobel Staff Lighting

### CONTACT

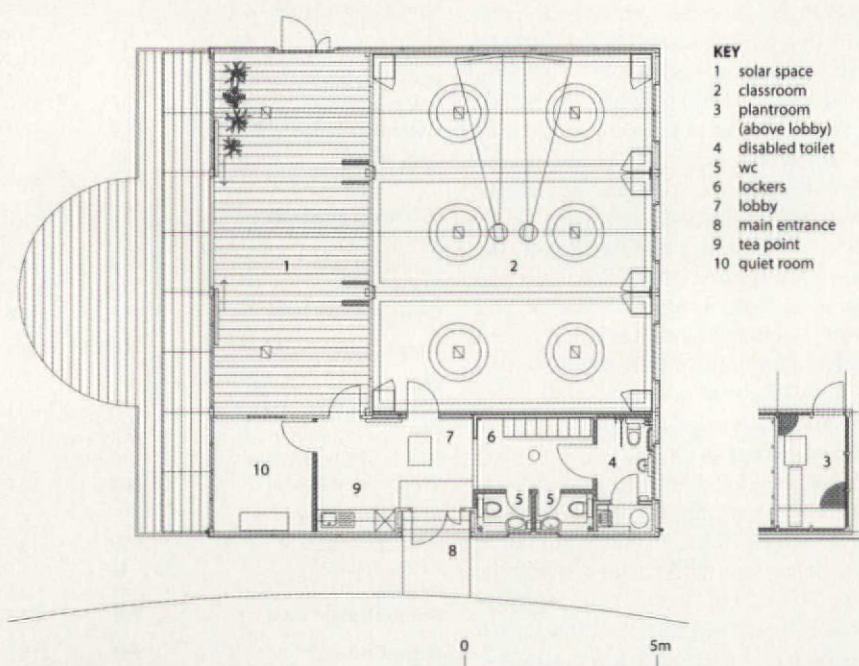
Fiona Colamarino: fiona.colamarino@devon.gov.uk



# Telford & Wrekin

Two flexible prefabricated prototype classrooms by Integer Consultants for school and community use

Photography by Yorkon



With school space increasingly becoming community space too, these 'classrooms' have been designed as larger (169m<sup>2</sup>) self-contained units. As well as a class space there is a 4m-deep atrium and, to one side, an entrance lobby, WCs, kitchenette and small private room. These extra facilities provide welcome flexibility for the school in what is an IT-intensive facility, thus one whose future direction is constantly evolving. The classrooms can also be offered or hired out as stand-alone units. Two classrooms have been built, at a junior school (Wrockwardine Wood) and a secondary school (Lord Silkin).

Architect Cole Thompson is part of the Integer Consultant Team that also provided the project with expertise in ICT, building services and education. (It was Integer that created the BBC House of the Future at BRE.) Another source of input was staff, students and parents; at Wrockwardine the students were involved from particularly early on, contributing wish lists and design ideas. Students from both schools visited the Yorkon factory during the classrooms' manufacture. One sign of this student involvement is the adjustable-height desks, their worksurfaces made from recycled plastic bottles. The two schools won the 2003 Arts Council/CABE Building Sights Award that recognises the engaging of local communities in the construction process.

Another thread to the project has been prefabrication. When the Borough of Telford &



Wrockwardine. Four prefabricated modules, with roof-mounted photovoltaics and solar water heating. Opposite: conservatory opens on to classroom







Wrekin appointed Integer it was already thinking of creating a better class of relocatable classroom and had prefabricator Yorkon on board, though not then working to a specific school brief. The completed classrooms have simple point foundations of screw piles, suited to relocation, though the time pressures of prototyping them as a live project led to there being more sitework than originally envisaged. Each classroom comprises four 12m-long prefabricated modules (see *Working Detail*, p40-41). Integer spent some time getting to understand the prefabrication system and the potential to customise the standard offerings, some of which has been realised, such as underfloor cabling and background electric heating, ceiling lighting without suspended ceilings and increased insulation. It is estimated that build time has been halved.

Sustainability has also been a project focus; the Eco Warrior energy-monitoring software should soon be delivering monitoring data to classroom interactive whiteboards. As well as upping insulation levels, there are low-energy light fittings with presence detectors, solar water heating and photovoltaics (more than enough for the lights but not enough for IT). Most evident as an energy strategy, and clearly legible to the students, are the building's section and southerly orientation. The conservatory, with motorised roof vents, fronts the class space, accessible through a wall of glass doors. This class space has to reconcile the twin requirements of openness and security of equipment, so there are few other windows (with metal grilles) to the class space and above the glass doors to the conservatory there are roller shutters. Light pipes/windcatchers bring light and ventilation into the depth of the space.

The clients were not keen to be ICT equipment pioneers; in particular they went for wired rather than wireless laptops in the classroom, though there are tablets that can be carried around, used in the conservatory or out in the school grounds. Each classroom has a video link, which was used at the official opening to link the two schools, and is planned to connect to other schools in the area.

The classrooms are demonstrating their flexibility as spaces used by juniors and secondary pupils, with the ICT-based teaching methods only now emerging as people explore the possibilities. Each classroom works as a shared resource for the school rather than a permanent class base. There is a new, combined management group for the two classrooms with plans that may involve sharing these spaces more widely with other schools and the community, maybe on two days per week, and also becoming bases for local staff training.

For Telford & Wrekin it is time to stop and evaluate rather than roll out more classrooms. Whether a market for these generously sized prefabricated units (by normal 55m<sup>2</sup> classroom standards) can be developed remains to be seen. They do provide a quality of building as good as any other classroom. They do meet an emerging need. And beyond that, their inbuilt potentials are suggesting new possibilities to the client schools.



Lord Silkin school, identical to Wrockwardine except for timber, not metal siding



Up on the roof, with vents and light pipes. Adjustable-height desks with tops of recycled plastic



#### COST SUMMARY

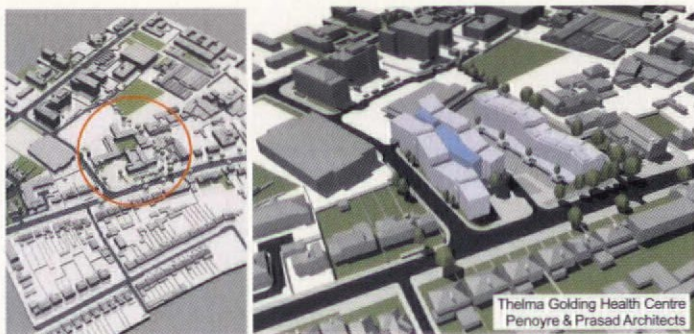
Data for one classroom, based on final account, for gross internal area. The cost of £2,012/m<sup>2</sup> is for the two-off prototypes, with a view to future batch production. Savings in maintenance and energy costs, compared to traditional construction, are estimated at £84/m<sup>2</sup>

	Cost per m <sup>2</sup> (£)	Percentage of total
<b>MODULES</b>		
Shell: cladding, windows, ceilings, etc	712.70	35.44
Fit-out: partitions, doors, finishes, etc	157.25	7.82
<b>Group element total</b>	<b>869.96</b>	<b>43.26</b>
<b>SUBCONTRACT QUOTATIONS</b>		
Folding doors	48.49	2.41
Sunpipes/windcatchers	80.50	4.00
<b>Group element total</b>	<b>128.99</b>	<b>6.41</b>
<b>CLIENT'S DIRECT CONTRACTS</b>		
M&E base cost	378.70	18.83
PV panels	25.88	1.29
Conservatory roof, plantroom, brise-soleil, gutters	315.38	15.68
Additional cost for brise-soleil infill	10.65	0.53
Siteworks	110.53	5.50
Screwfast foundations	29.59	1.47
<b>Group element total</b>	<b>870.73</b>	<b>43.30</b>
<b>ICT ALLOWANCE</b>	<b>142.01</b>	<b>7.06</b>
<b>TOTAL</b>	<b>2,011</b>	<b>100</b>
<i>Cost data provided by Cole Thompson Associates</i>		

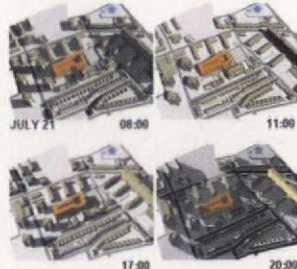
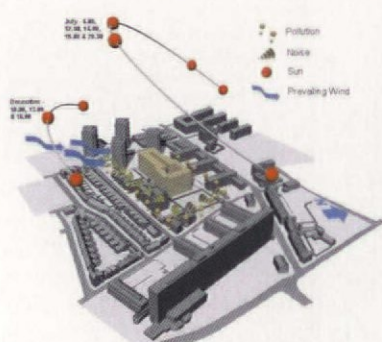
#### CREDITS

<b>START ON SITE DATE</b>	January 2003	<b>Education consultant</b>	enabling concepts
<b>CONTRACT DURATION</b>	Six months fabrication, erection and fit-out	<b>FURNITURE DESIGN</b>	Counties Furniture Group
<b>GROSS INTERNAL AREA</b>	169m <sup>2</sup> per school	<b>MODULAR CONTRACTOR</b>	Yorkon
<b>CONTRACT</b>	Series of client direct contracts	<b>SUBCONTRACTORS AND SUPPLIERS</b>	Folding doors Alco
<b>TOTAL COST</b>	£339,976 per school		Beldan; conservatory roof
<b>FUNDING BODY</b>	Department for Education and Skills		Apropos; siteworks Cader
<b>CLIENT</b>	Telford & Wrekin Council; Pam Newall, Mike Webb		Construction; electrical
<b>DESIGN TEAM</b>	Integer Consultant		Connect 2; WCs
<b>Team, comprising:</b>			Construction Resources; furniture Counties
<b>Architect, cost consultant, planning supervisor</b>	Cole Thompson Associates:		Furniture Group; green
	Nicholas Thompson, Craig Anders, David Wriglesworth, Lee Masters		roof Erisco Bauder; floor
<b>Technology consultant</b>	i&i		finishes Forbo-Nairn;
<b>Building services engineer</b>	Brian Warwicker Partnership		blinds Levolut; access
			ladders Loft Ladders;
			roller shutters Mercian
			Industrial Doors; roof
			vents, sun pipes
			Monodraught; floor
			Neaco; pile foundations
			Screwfast Foundations;
			walls, sliding doors
			Securefront Systems;
			photovoltaics Solar
			Century; solar panels
			Sundwel
			<b>CONTACT</b>
			Pam Newall,
			email: pam.newall
			@wrekin.gov.uk





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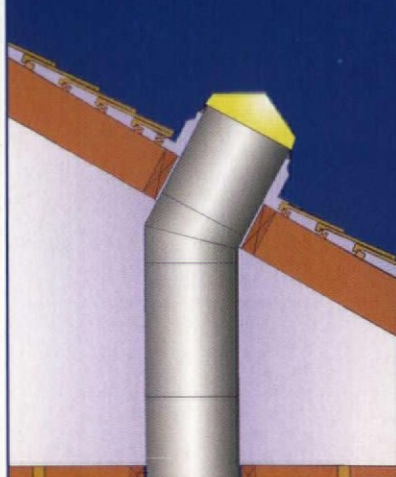
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## Prototype for a pre-fabricated classroom

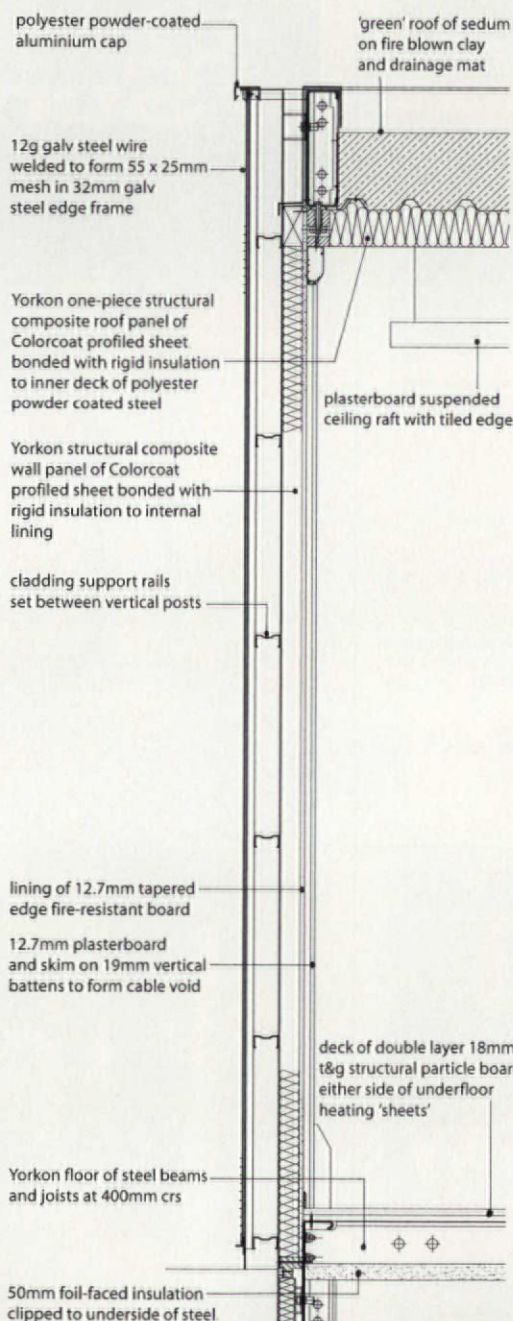
The two prototype buildings demonstrate how prefabricated systems can be modified to produce an environmentally sound and energy-saving classroom. They have identical plans and construction but are clad with different materials – the junior school is clad with panels of horizontal untreated Western Red cedar boards and the secondary school is clad with galvanised steel mesh screens, on to which plants will be encouraged to grow.

Each building is fabricated from four 13.3 x 3.3m Yorkon modules bolted together. One contains an entrance hall and WCs, the other three – with some intermediate walls omitted – form the main classroom and conservatory. Above the conservatory the roof has been omitted but the edge beams have been retained to support a new glazed pitched roof. Standard door and window assemblies have been used throughout.

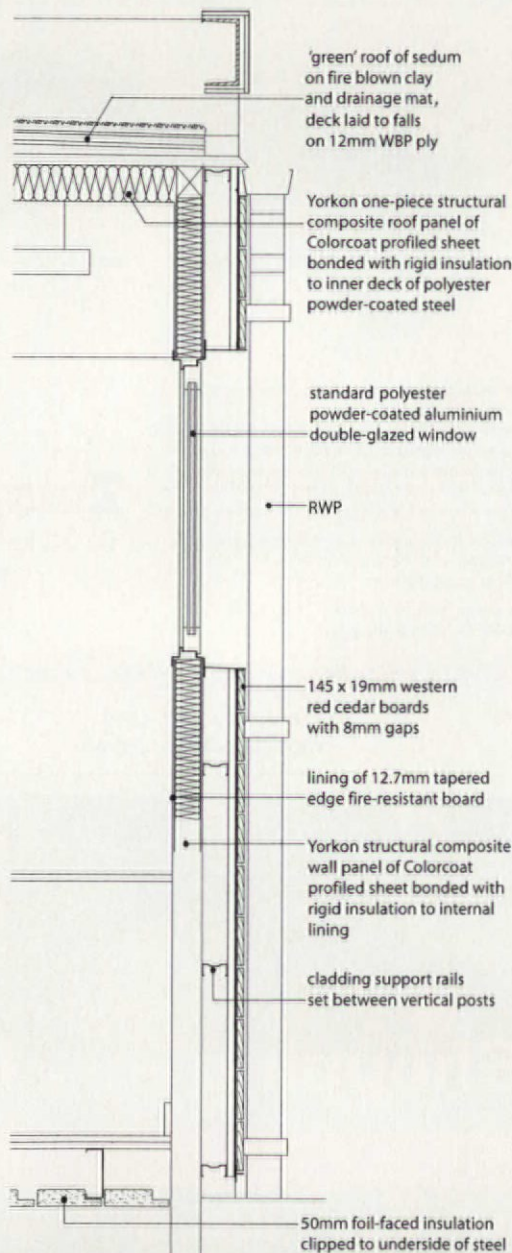
Above the classroom and entrance hall a green sedum roof, laid on firrings, has been added to the standard Yorkon flat roof, a structural composite panel comprising a profiled steel sheet bonded with rigid insulation to an inner steel deck. Ventilators and sun pipes run through the roof at the back of the classroom.

The new galvanised steel mesh screen and cedar board cladding run to the eaves, concealing the standard edge beam, fascia and standard composite wall panel. Internally an additional layer of plasterboard on battens has been added to the standard wall panel – profiled-sheet bonded with rigid insulation to an internal lining of fire-resistant board – to form a cable void. The standard floor construction has also been modified to create voids for cable runs. Each module rests on six steel screw pile foundations, which support the steel joist Yorkon floor structure.

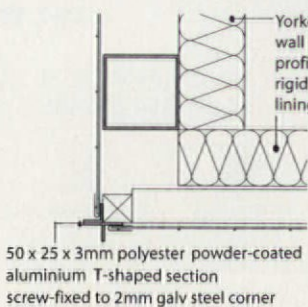
Susan Dawson



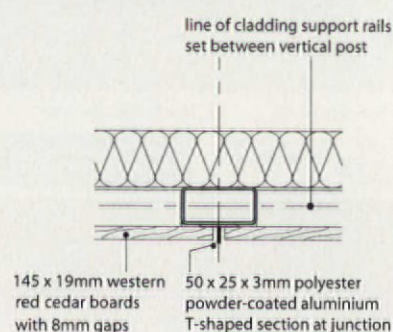
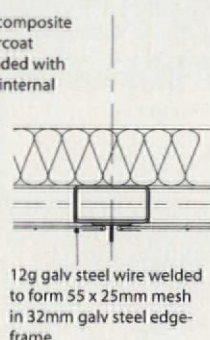
DETAIL SECTION THROUGH WALL CLAD WITH STEEL MESH



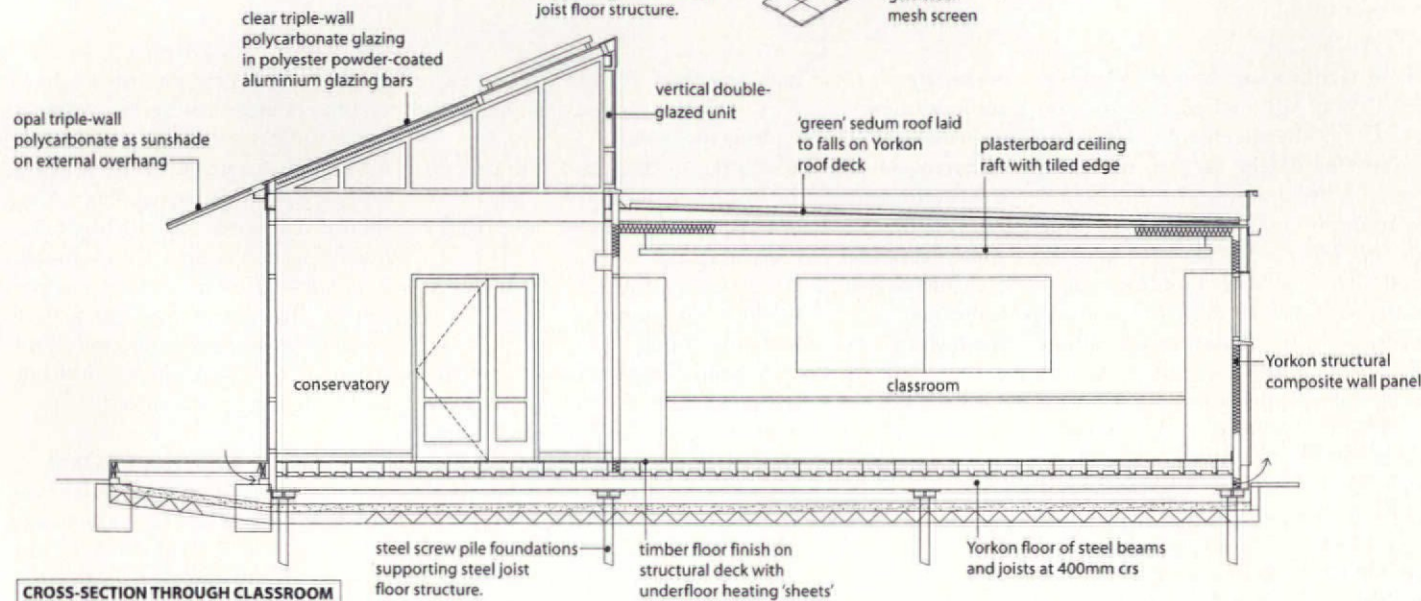
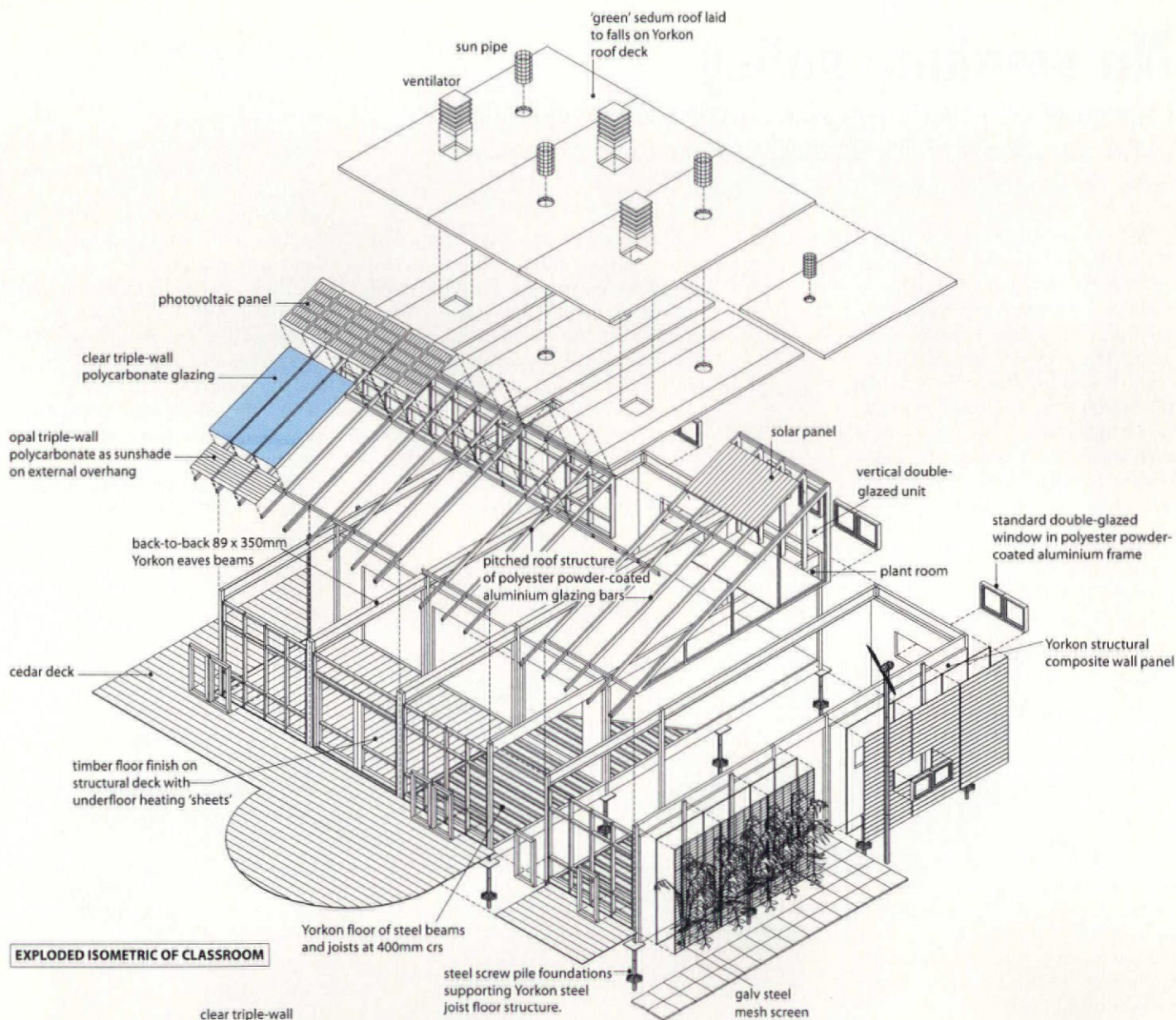
DETAIL SECTION THROUGH WALL CLAD WITH CEDAR BOARDS



DETAIL PLANS OF MESH AND CEDAR SCREENS









# No smoking policy

Computational fluid dynamics can provide an illustration of how smoke and fire strategy will perform in reality

BY STEVE MCCORMICK

Within a very small space of time a fire has the potential to ignite, develop and cause enormous damage to buildings and structures, presenting life-threatening danger to the occupants. The ease with which this can occur is seen on a daily basis. While the capital cost of damage to buildings is significant, the impact on life is even greater, with around 650 fatalities and 18,000 injuries per year in the UK alone. Around 70 per cent of

exposed to untenable temperatures or levels of smoke that may overcome them or hamper visibility through escape routes. The structural integrity of the building must also be maintained for a minimum period of time, at least until the emergency services can arrive.

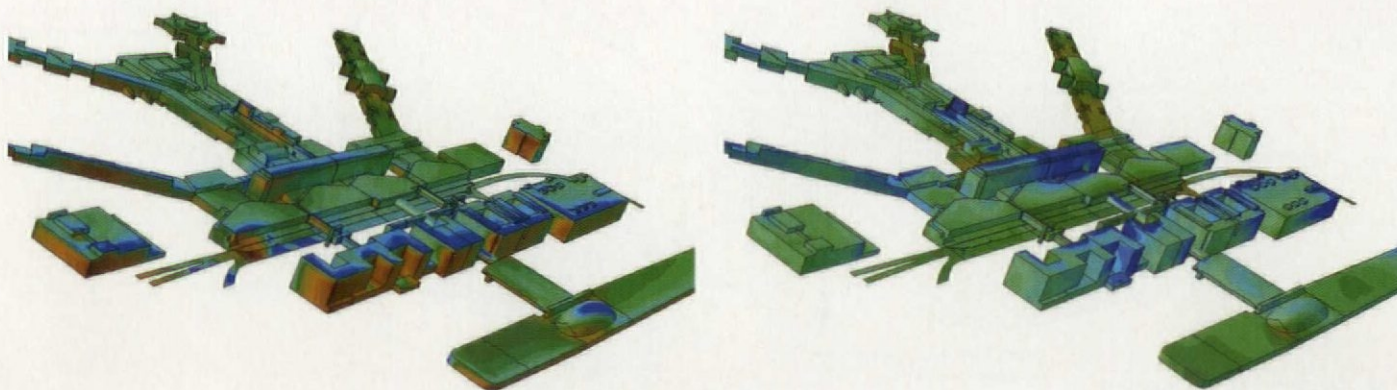
Several options are available when designing a fire protection and smoke management system:

- sprinkler systems, triggered by

data. This offers several key benefits:

- cost-effective investigation of a design prior to construction;
- comprehensive data such as temperatures, smoke levels and resulting visibility throughout the entire area modelled;
- detailed visualisation of the air and smoke flow allowing any problems to be diagnosed.

The use of CFD tends to be focused on the design of high-occupancy buildings and structures. Several factors have contributed to the increase in the application of CFD for fire and smoke modelling. Modern architecture can provide many opportunities for smoke to permeate areas of a building that are not local to the fire source and potentially increase the spread of



these fatalities are caused by smoke inhalation. Although these figures are reducing, there remains scope for improving safety further by using modern technology. Fire protection is an important issue in any building design, but particularly in high-risk and high-occupancy buildings. Engineers responsible for this are required to prove that a building will afford occupants a safe passage to an exit under specific fire scenarios.

When designing for fire and smoke management, the fire protection engineer is typically looking at providing a system that will allow occupants in a building a means of escape in a suitable timeframe after detecting the fire. They cannot be

**Above left:**  
static pressure  
on Frankfurt  
Airport (wind  
from north-east)  
**Above right:**  
static pressure on  
Frankfurt Airport  
(wind from  
south-west)

high temperatures, are used to suppress a fire by extinguishing it or limiting its spread;

- ventilation and extraction systems are tuned to limit the exposure of occupants to smoke – the primary cause of fatality;
- barriers and baffles can be added to limit the spread of smoke into particular areas.

A good design must be effective and practical in the strategic location of these facilities, requiring a detailed understanding of an unpredictable process – the transport of heat and smoke from the fire zone. Computational fluid dynamic (CFD) methods simulate this complex flow and heat transfer process, providing valuable

smoke or fire. Atria, for instance, have become popular features for promoting natural ventilation but provide a direct route for smoke from a fire on a lower level to rise to upper floors. Also, the trend towards constructing taller buildings, both in the UK and abroad, has resulted in inevitably longer escape routes. This has in turn put greater pressure on evacuation strategies, and required an increasingly in-depth analysis to help ensure efficacy.

## Satisfying the inspectors

In many cases, unconventional layouts or ventilation schemes mean that a conventional approach to fire protection and smoke management would impose a scheme that is



impractical or even prohibitively expensive to implement. Nowadays, the results of CFD analysis are taken by the regulatory authorities as evidence that a proposed scheme satisfies the necessary requirements.

CFD as a technology has advanced rapidly and is now much easier to use, so that engineers without previous CFD experience can create and analyse models quicker than ever before. At the same time, high-powered computing resources are becoming more affordable and so models can be built and solved in shorter timescales. These factors have led to CFD becoming a feasible option for building design teams.

There are several examples of where CFD has been implemented to aid

'CFD has advanced rapidly and is now much easier to use, so engineers without CFD experience can create models quicker than ever before'

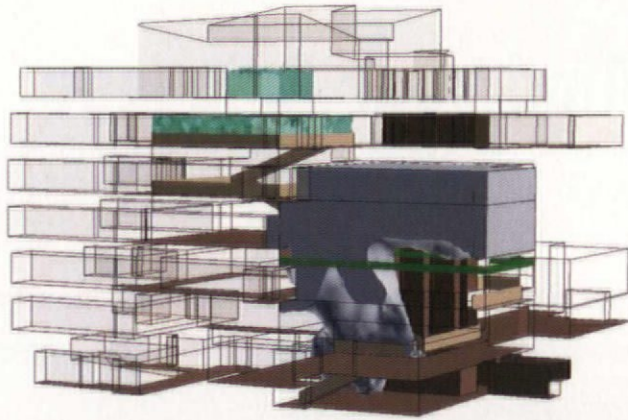
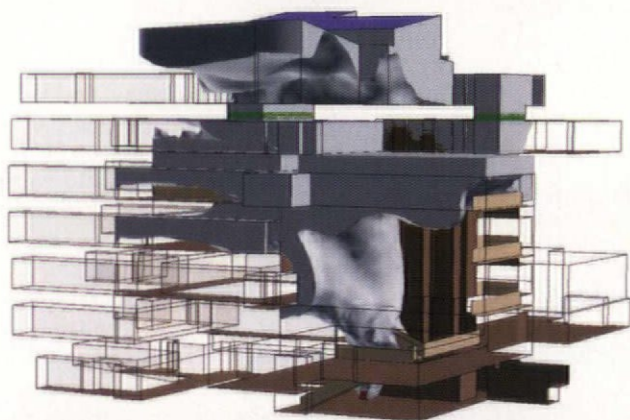
The Budapest Sports Arena in Hungary was a prominent city landmark, completely destroyed by fire in December 1999. Unsurprisingly, the design of the new stadium to replace this put a lot of emphasis on fire safety. The layout of the smoke management equipment was tested, using the simulation capabilities of CFD to investigate three different fire scenarios. In each case, results showed that occupants at the highest grandstand level would not be subjected to harmful rising smoke within a 10-minute window, allowing adequate time to vacate the building. Also, temperatures within the smoke cloud were sufficiently low to ensure the structure would not be compromised.

Ultimately, if CFD results show that

fy a 'design' fire heat release and smoke generation rate for the fire – specific to what is being burned and how long it is expected to burn in a given environment. The results will allow them to track what happens in terms of heat and smoke movement and gauge the conditions for tenability of the occupants. This typically provides a reliable solution approach, given sensible input quantities. More advanced techniques are looking to predict fire spread and suppression as well. However, these are still much less validated approaches, often introducing unknown or low reliability parameters into the simulation that can impose varying levels of uncertainty in the final results.

Where possible, the approach used should be validated against sensible

COMPLEX ATTRA IMAGES COURTESY OF ROMAN WILLIAMS DAVIES AND IRWIN INC, CANADA



building design and give confidence in the safety of evacuation procedures. In Germany, a serious fire at Düsseldorf Airport in 1997 led to a review of the fire protection strategies in place at other airports around the country. Following this, the plan for renovation of Terminal 1 at Frankfurt Airport was reappraised to discover if the fire protection scenarios in place as part of the redesign could be optimised. CFD was used as part of this process. One of the problems identified was the thickness of the smoke layer in regions with low ceilings. Fans and smoke outlets were carefully positioned to ensure that a nearly smoke-free layer – around 2m high – was provided at floor level to allow safe evacuation.

**Above left:**  
model of smoke penetration inside atrium.  
**Above right:**  
model of smoke penetration in atrium with smoke management system

preventative technology and smoke clearance ventilation will eliminate the problem, then these mechanical interventions can be factored into the building's approved fire strategy.

The successful use of CFD in the previous two examples begs the question, why don't all consultants use this technology? The answer is that it must be remembered that it is not a 'black box' tool; it is not a rule of thumb; and it is not, as with Building Regulations Approved Documents, a universal guide. CFD requires, inevitably, a fire protection engineer to specify the behaviour of the fire and interpret the results. This is an added cost, but could pay dividends.

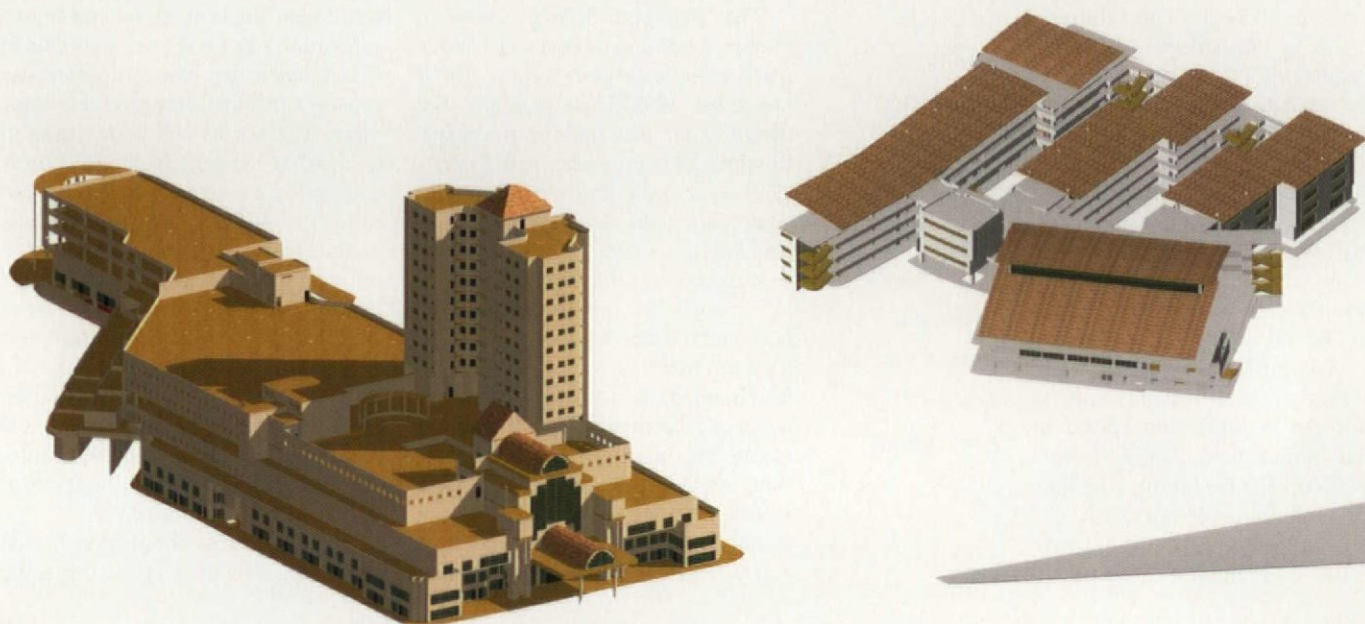
Commonly, the engineer will speci-

metrics from physical tests or published data at the early design stage, particularly with novel designs. To a lesser extent, some final comparisons can be performed with minor tests during the final commissioning.

CFD is a powerful tool enabling fire protection engineers to design modern buildings. Previously designs were often based solely on experience and judgement. That's fine, but the considered application of this tool in competent hands will improve fire engineering and hopefully continue the reduction in capital cost, injuries and fatalities.

Steve McCormick is senior engineer at Fluent Europe. Contact [steve@fluent.co.uk](mailto:steve@fluent.co.uk) or visit [www.fluent.com](http://www.fluent.com)

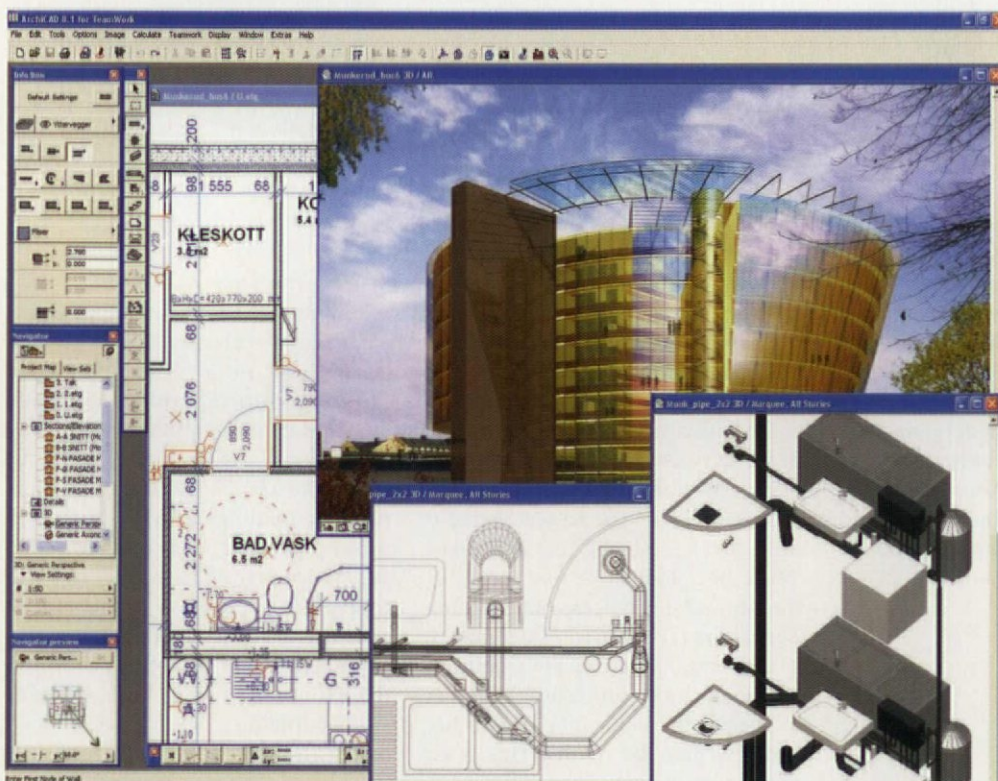




## Mind your language

Will a single system ever be established to allow the movement of CAD data between different file formats?

BY JOE CROSER



Above: Graphisoft is promoting the use of IFCs. Top: Singapore projects

Towards the end of the 19th century, a chap called Zamenhof decided that the creation of a new and universal language could reduce barriers between people by not favouring any one single people or culture. Not wanting to waste any time, he promptly invented Esperanto.

Since then others have followed suit, and in the CAD world the Drawing Interchange Format (DXF) was developed for overcoming the hurdles encountered when trying to move CAD data from one proprietary file format to another. But in a world where the reuse of CAD data is now recognised as paramount to the success of collaboration, the dumbing down of data courtesy of the DXF 'smash and translate' process is no longer acceptable. Furthermore, as CAD models can now hold additional non-graphical information about geometry, it is desirable that this information also travels with the geometry when moving from one application to another.

Foreseeing this need, a group of people came together in the early '90s to form the International Alliance for Interoperability (IAI). The plan was to create a new universal language for exchanging CAD data, and the result of their efforts to date is the Industry Foundation Classes or IFC descriptions. IFCs



There are more than 3,000 rooms in this residential development in Singapore, used to test data sharing



describe objects, rather than simple geometry like DXFs, and the IFC language is completely open to all. The latest incarnation of IFC is version 2x. It can move data between applications for the following processes:

- structural analysis;
- concrete and steel structures;
- HVAC design and performance simulation – electrical design;
- piped services;
- facilities and property management.

This kind of inter-disciplinary data sharing is most certainly the way forward for moving 3D models between diverse systems, but I fear that another independent file format cannot be the way to go. I spoke to John Mitchell of Graphisoft, who is championing all things IFC, to get a better understanding of the IAI and the projects where IFCs are being used. One such project is in Singapore, where the equivalents of our building-control and planning departments have now mandated that all submissions be made online using IFCs.

However, the Singapore government's choice to mandate IFCs was not something that happened overnight. John Mitchell explained that the Singapore government first tried to mandate MicroStation and later AutoCAD, but both attempts to standardise the submitted files failed, allegedly for two reasons: the com-

'Inter-discipline data sharing is most certainly the way forward for sharing 3D model data between diverse systems'

munity was unhappy at the software application mandate; and the applications were not sufficiently robust.

Then, three years ago, the Singapore government joined the IAI and changed its mandate from DWG to IFC. Today the 13 building agencies are able to share the data submitted and the reports extracted from the models, leading to better intercommunication between departments. Furthermore, with just a single submission, as opposed to the 13 required before, consultants' workload is also greatly reduced.

These submissions are now also made by logging on to a central IFC server, where the data is checked for consistency and integrity, and a report returned to the sender. While the Singaporeans seem to be leading the way, there is a groundswell of others following in their tracks. In the US, the General Services Administration (possibly the largest building owner in the world) has passed a motion stating that after 2006 it will only accept CAD data in IFC format. In Norway, Germany and France other government departments, construction companies, designers and savvy clients are also sharing data the IFC way.

Mitchell summed up a stimulating and enlightening conversation by saying that, as pressure is building for change in the industry, he expects this

year to see an IFC explosion. My scepticism reminded both of us that in 1994 I was visited at my office by an exponent of the then recently formed IAI, who told me that within three to five years the whole industry would be working with IFCs. Ten years later, most people are still quoting the same figures. Sometimes I think being different is simply not enough (you have to be better too), even when your motivation for creating something different is to remove the differences that cause the problems in the first place.

I am not convinced Esperanto has achieved the levels of usage and acceptance within society that Zamenhof had imagined. Indeed, if you search on Google for 'Beckham' you will receive 50 per cent more hits than you would if you searched for 'Esperanto'. But what of the IFCs? Well, again using Google, 'DWG' returned nearly 900,000 and 'DXF' nearly 700,000, but 'IFC2x' managed a meagre 3,500 hits.

But the IFC is still young in comparison to the others listed, and somehow the charismatic Mitchell left me thinking that we have not heard the last of IFCs. I do hope he is right. Anything that effectively levels the playing field, and enables CAD users to vote with their feet where vendors are concerned, can only be good news for us all. Joe Croser can be contacted via email at [joe@croser.net](mailto:joe@croser.net)





## Ceiling collapse tests the limits of insurance policy's liability

Insurance is often thought of as a safety net to catch the fallout when things go wrong. But insurers are professional risk takers who expend much effort considering whether or not they are obliged to pay out. The limitations of one particular policy were recently explored by the Court of Appeal in *Horbury Building System v Hampden Insurance* (7.4.04). The case illustrates that an insured party may well find themselves potentially liable for things not covered by their insurance policy.

Horbury was a subcontractor that provided the ceilings throughout a 16-cinema complex in Manchester. Two days after the complex opened, the ceiling of Auditorium 6 collapsed. Thankfully this happened when the building was unoccupied. The cinema operator closed the whole complex. It stayed closed for several weeks, and the operator lost money.

Everyone agreed that the collapse of the ceiling in Auditorium 6 did not physically prevent the use of the rest of the complex, nor did the collapse cause physical damage to other parts of the building. Horbury's insurance policy was called an all-risks policy, but it was in fact insurance for liability to third parties, including product liability. As such, the policy covered it for liability 'in respect of' loss of, or damage to, property caused by products.

Horbury wanted to know whether this cover included all the operator's loss of profit. Horbury argued that the closure of the whole complex, insofar as it was not directly caused by the collapse in Auditorium 6, was the result of a prudent and foreseeable response to the collapse. As such, it said, all the loss of profit should be covered by the policy.

When Horbury started the proceedings against its insurer, the operator had made no claim, so the basis of any possible liability of Horbury to the operator was uncertain.

The court proceeded on the basis of many assumed facts. Those included that the cause of the collapse was the use of the wrong washers. As a result, individual hangers disconnected, and with each disconnection the load on adjacent hangers increased. The wrong washers had been used in four other auditoria.

The Court of Appeal decided that the insurance policy covered Horbury for its liability for the physical damage done by the collapsed ceiling in Auditorium 6 – in other words the damage to the seats, decorations and so forth, and the economic consequences of that physical damage. That was limited to the loss of profit arising from the necessary closure of Auditorium 6 itself. The loss of profit arising from the closure of the whole complex was not 'in respect of' the damage that had occurred.

The Court of Appeal said that the words 'in respect of' limited the extent of the insurance cover. The words did not simply identify that the loss should have some connection with the causal event. While in one sense the collapse of the ceiling in Auditorium 6 had caused the closure of the whole complex, the real cause of closure was the operator's concern about the possibility of similar defects in the complex.

To interpret matters otherwise would transform a product-liability insurance contract into something far broader.

In reaching this conclusion, the Court of Appeal hypothesised about what

the policy would have covered if the problem had been discovered before the collapse. The answer was nothing; there would have been no damage to property. There would be no cover for loss of profit caused by the closure of any part of the building.

So if the policy had meant what Horbury said it did, that would mean that if there was some actual damage to part of the building and the operator chose to close the whole building to investigate, all the loss of profit from closure would be covered.

However, if there was no physical damage, but something else put the operator on notice that there was a problem and they opted to close the building, in that case there would be no cover for loss of profit.

The Court of Appeal decided that such a result would be capricious. The intention of the parties had been that there would be cover for losses caused by the physical damage, and that was limited to the losses related to Auditorium 6.

Kim Franklin

**'The Court of Appeal said the words "in respect of" limited the extent of the cover'**

## Maxwan's double Dutch and the BT 'Bulk' bonanza

I hope you will excuse the Little Englanderism, but if you want to give the lie to that urban myth about the total supremacy of the current bunch of Dutch architects, direct yourselves to [www.maxwan.com](http://www.maxwan.com), the home of Rotterdam-based architect Maxwan. At least, I think it is. The consensus in the office is that it's possibly a spoof on the grounds of terrible, terrible graphic design, error reports all over the place, links not found and the job ad for a Serbo-Croat-speaking architect and urbanist with advanced knowledge of Excel, master skills in AutoCAD, Photoshop, Quark or InDesign and editing and publishing experience plus, preferably, a master's degree. Oh, and what on earth is going on in the 'shop'?

A bunch of excruciatingly dull but fast-moving images of a wasteland site seems to claim a Barking connection. When I ring the official Barking Reach site, the bloke at the end of the phone naturally doesn't deal with it but thinks Maxwan is indeed doing something. Just hope the masterplan is a bit more readable than the website.

*Guardian* readers will be acquainted with serial complaints about BT merging its email system with Yahoo. Dumbed-down for the average stupid user, BT/Yahoo is laborious, patronising and does things you don't understand until a call-centre person points them out to you. Like the fact that the 'Bulk' folder holds suspect malware. It keeps on putting AJ Plus news items in this folder despite being told they are not spam. When you do this, incidentally, and hit return you are faced with the full text of the next message and that's how modern viruses can apparently get through. The *Guardian's* Jack Schofield recently concluded that readers should consider abandoning BT/Yahoo and, among other alternatives, suggested [www.plus.com](http://www.plus.com), which is six-quid cheaper. I pass this on untried because at the moment it's too much fun baiting the earnest BT call-centre people about the crap... All right, I know, I should get a life. [sutherland.lyall@btinternet.com](mailto:sutherland.lyall@btinternet.com)



PROJECT HIGHLIGHTS



**BBC BROADCASTING HOUSE, London**  
 Client: BBC  
 Architect: MacCormac Jamieson Prichard  
 Value: £ 400m Cost savings: £ 1.7m  
 Area: 1m sq ft Area savings: 140m<sup>2</sup>

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- REMOVAL OF PRESSURISATION OF TEN STAIRCASES
- REDUCTION OF FIRE RATING BETWEEN BUILDINGS FROM 120 MINUTES TO 90 MINUTES
- USE OF TOUGHENED GLAZING IN ATRIA IN LIEU OF FIRE RATED GLAZING BY USE OF A SMOKE CONTROL SYSTEM

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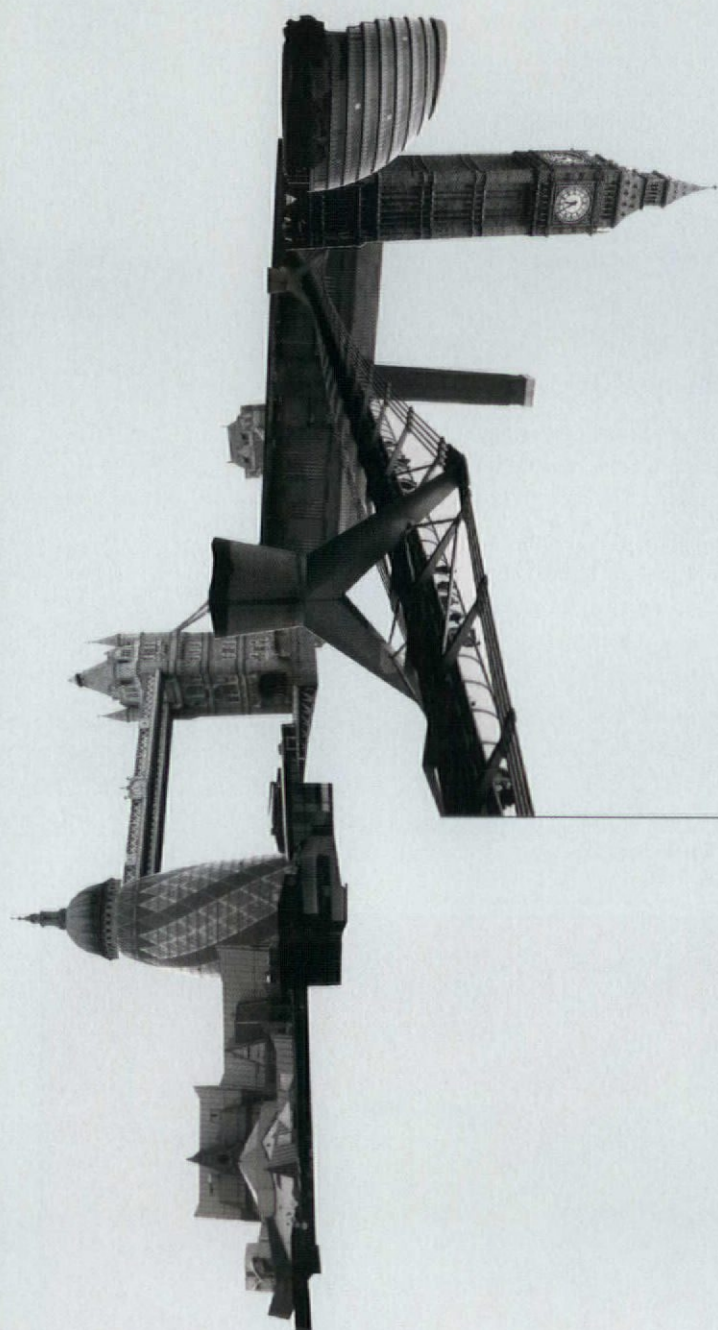
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The Architecture Foundation



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**Steven Norris** Conservative  
**Simon Hughes** Liberal Democrat  
**Darren Johnson** Green  
**Chaired by Rowan Moore**  
Director, The Architecture Foundation

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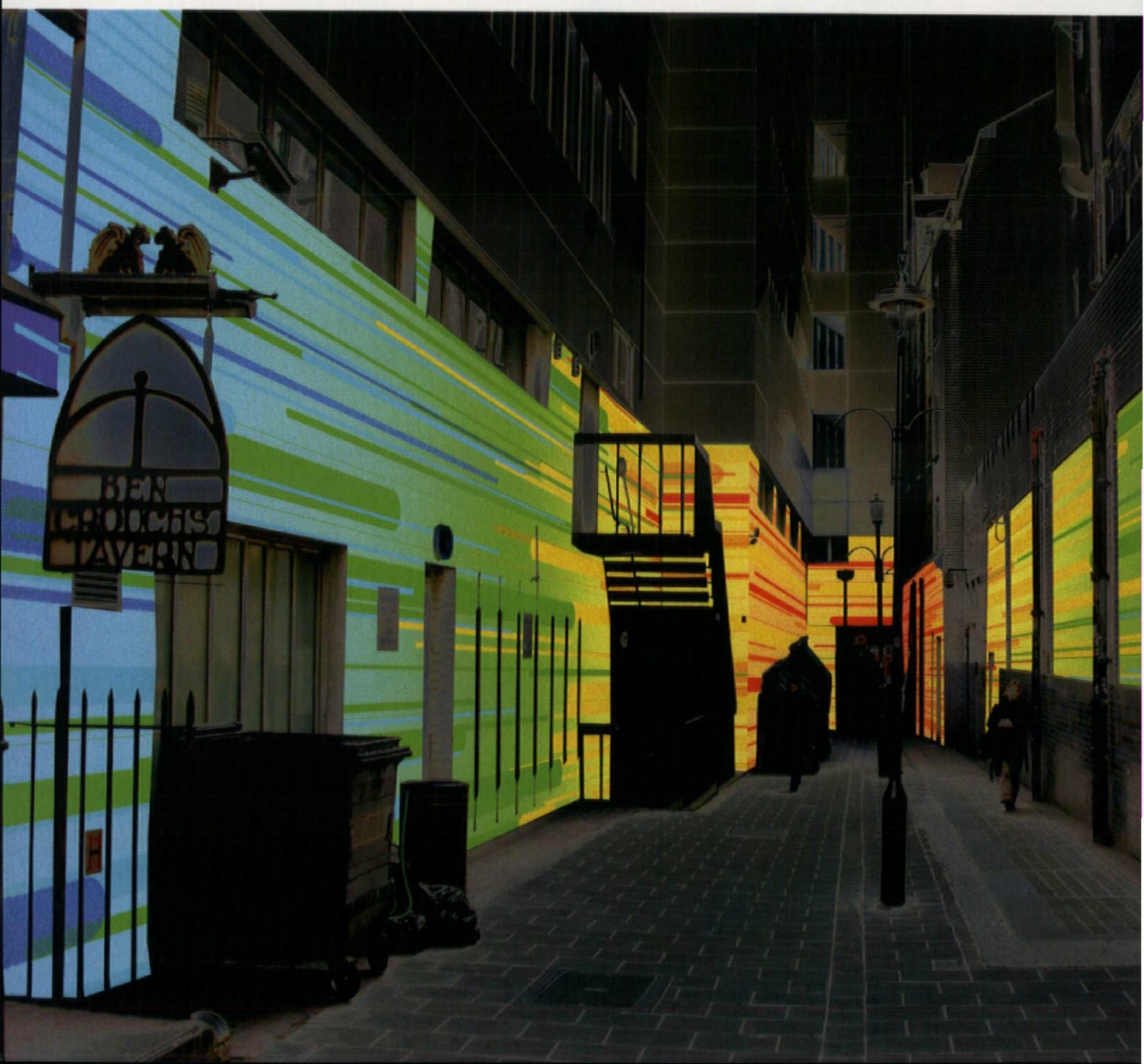
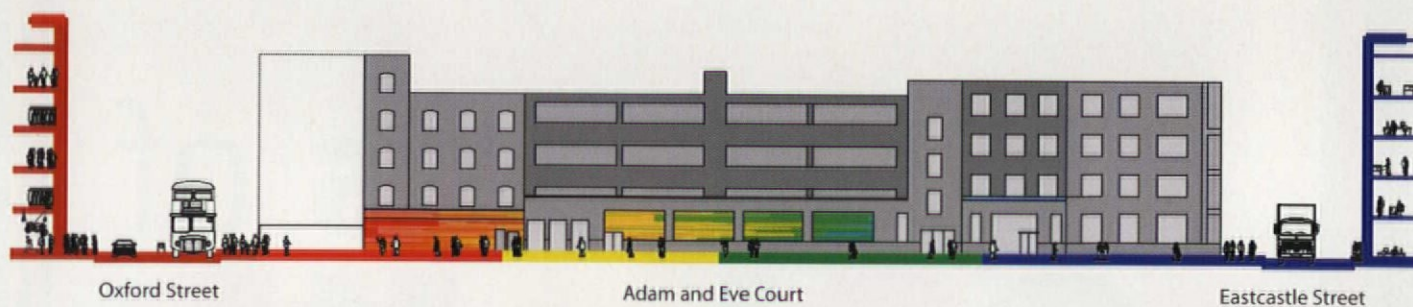
# **streets of** **COLOUR**

**Winners and runners-up in  
Keim Mineral Paints' awards to  
brighten up the country's streets  
are shown on the following pages**

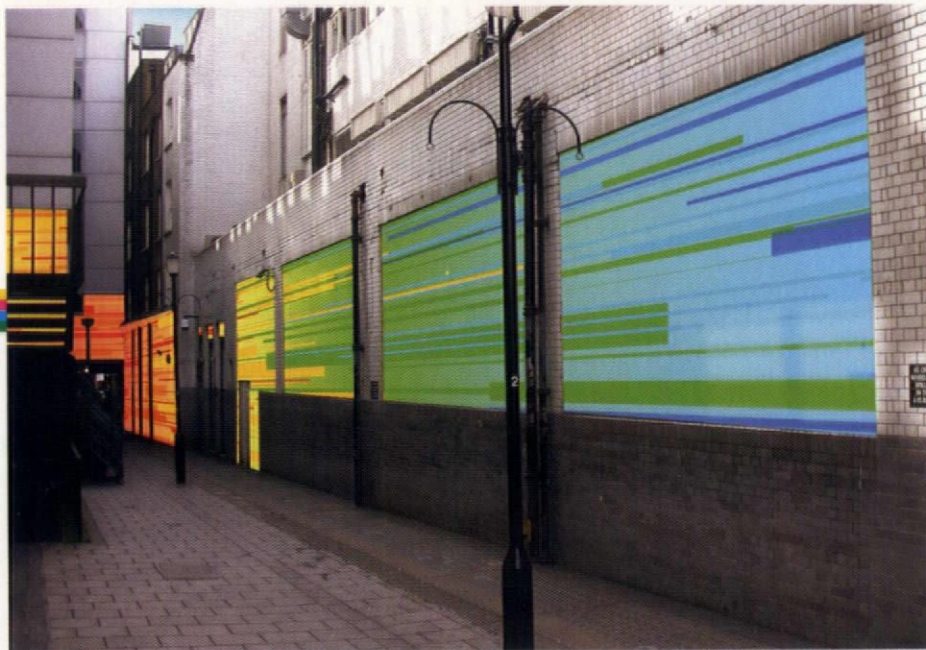




winner

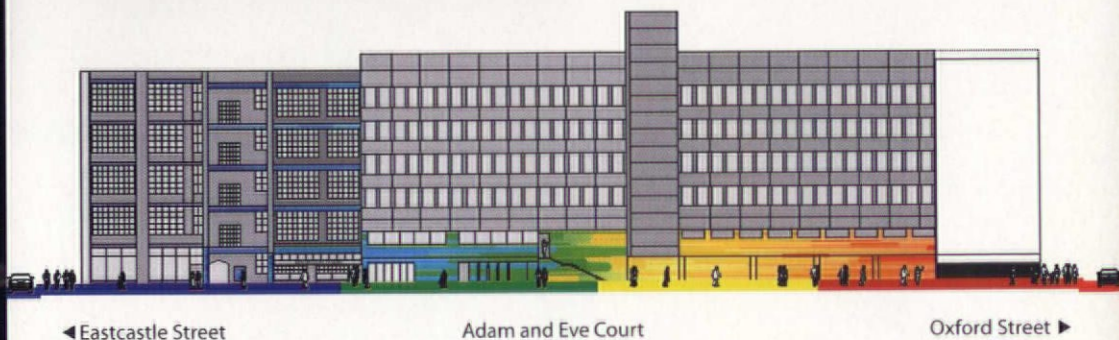






## barr gazetas

**T**he winning project tackles Adam and Eve Court, a neglected space to the north of London's Oxford Street, described as 'a paradise lost alley of concrete, steel and graffiti'. Barr Gazetas came up with a colour sequence of red to represent busy Oxford Street, with blue representing the calm Eastcastle Street. Ten streams of narrative flow together to create a single identity. The narratives are based on the contrasts between Oxford Street and Eastcastle Street. The judges were impressed by the dynamic use of colour in an urban context. This project could fit in with the ideas being developed for the improvement of Oxford Street by the New West End Company, supported by Westminster City Council.



◀ Eastcastle Street

Adam and Eve Court

Oxford Street ▶



2nd prize

pp collective

**H**arry Paticas and Colin Priest of PP Collective had a proposal that would develop over time. Their chosen site is Well Street Market, an area in the London Borough of Hackney that has not been gentrified. They based their treatment on the bark of the London Plane tree, which sheds progressively revealing more layers of colour, and chose a palette based on these colours. At Wells Street, two long strips of buildings would be painted in the first year in a light yellow. At the end of the year, when this paint was already soiled, the second layer would be added, with another layer added each year. At the end of five years, the base colour would be reinstated and the process would start again.

## WELL STREET - PLANE STREET

STREETS OF COLOUR  
COMPETITION 2004

### THE CHALLENGE:

To create a colour scheme for a London street that has been gentrified in the past and is now being left to decay. The challenge was to create a colour scheme that would be a visual representation of the street's history and its future.

### THE CONCEPT

The London Plane Tree (Platanus hybrid) was first introduced into London in the 17th century. With some urban specimens up to 100 years old, the tree is a part of the street scene of the city. The progressive shedding of its bark reveals successive layers of colour which, if treated in a particular way, could be a visual representation of the street's history and its future.

### WELL STREET

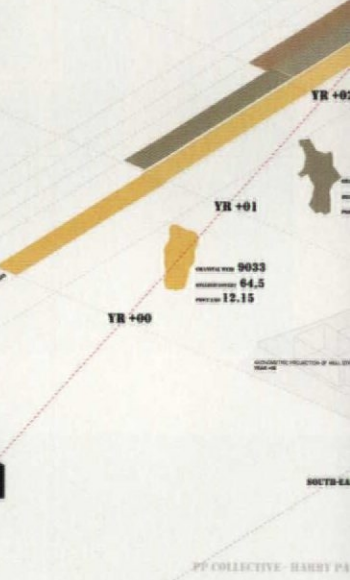
The site chosen for the intervention is Well Street Market in the Borough of Hackney. The street has just outside the Victoria Park Conservation Area of Hackney and has been a primary market since the 19th century.

### INTERVENTION

The very simple of colour that being the length of Well Street during the intervention is the length of the street. At each end of the street the walls are painted in the same colour as the walls of the street. The walls are painted in the same colour as the walls of the street. The walls are painted in the same colour as the walls of the street.

### IMPLEMENTATION

At the beginning of the first year the site is identified in the drawing. The site is identified in the drawing. The site is identified in the drawing. The site is identified in the drawing. The site is identified in the drawing.



### the site

The Blackfriars Underpass consists of two dual carriageways that pass beneath Upper Thames Street on the north bank of the Thames between Blackfriars Bridge and Southwark Bridge. Historically the underpass makes up part of the south side of 'The Bar' a bar for the transport network strategy conceived as part of post war reconstruction of the area. 'The Bar' was conceived as a high capacity viaduct route around the city but was never completed. Today the north route is a primary distribution route from Westminster through to Canary Wharf.

The Greater London Authority's Transport for London Department the Central Area Team are responsible for works to the underpass and are currently looking at maintenance proposals to terms of Improved Lighting to the tunnel. This proposal is planned for the next financial year.

It is possible that the tube project may not require formal planning permission for Blackfriars Underpass. But this would have to be confirmed by the Corporation of London and the scheme would require Transport for London's agreement.

### the experience

Blackfriars underpass, A0225 London. A site for heightened colour experience.

Colour and movement are experiences. This may occur in the direct vibration of colour relationships in a painting.

By the use of colour as a kinetic tool setting a rhythm in motion and circles as you move through a concrete underpass in your car. The city THE CITY, setting the beat, the vibration of speed, exhilaration.

**No stopping - 320 metres of concrete tunnel, the ooh, the ahh, breathe in, breathe out and into the light.**

Intensified experience of interior surfaces, walls. A three dimensional canvas, peripheral vision setting a kinetic trip of waves create the rhythm - scudding over you. Paint sprayed through the slits, over the ceiling and down the walls and not you go. ONE WAY. BLACKBURN. 1000000.

Visual detail showing the underside of the tunnel and walls. The design has been considered for the road, has been considered for the road, has been considered for the road.

The tunnel is currently characterized by its lack of identity - a void in the city. The underpass is not even visible for the brevity of its construction.

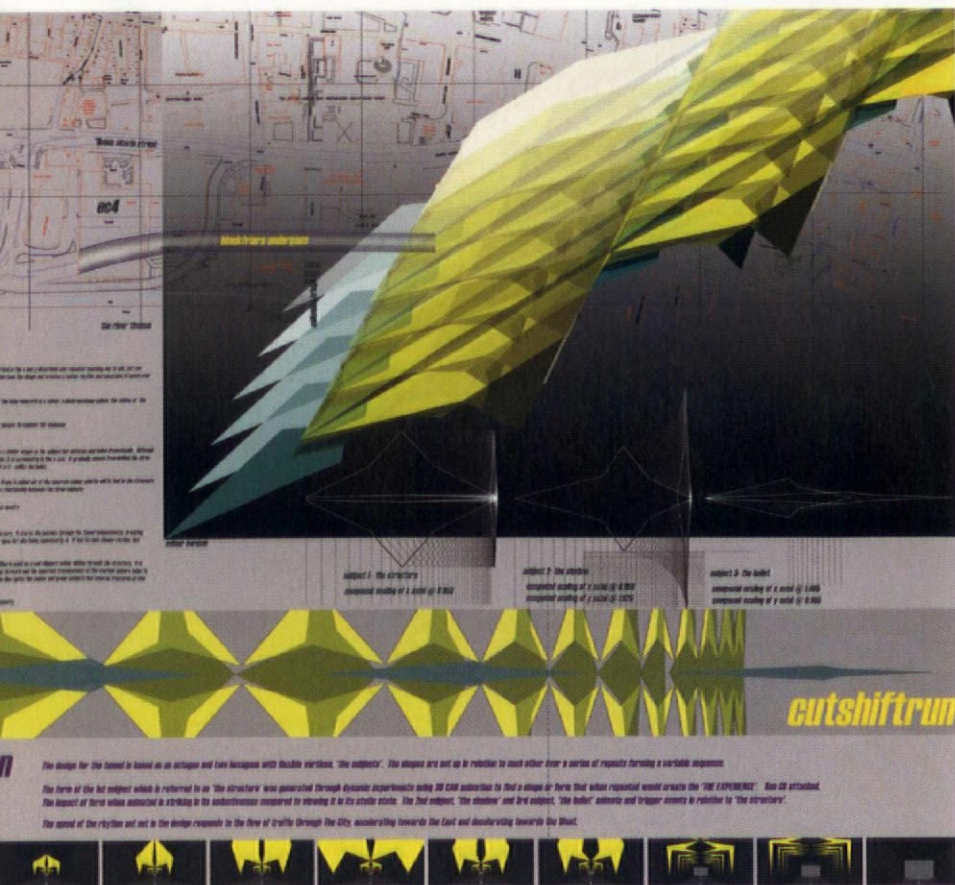
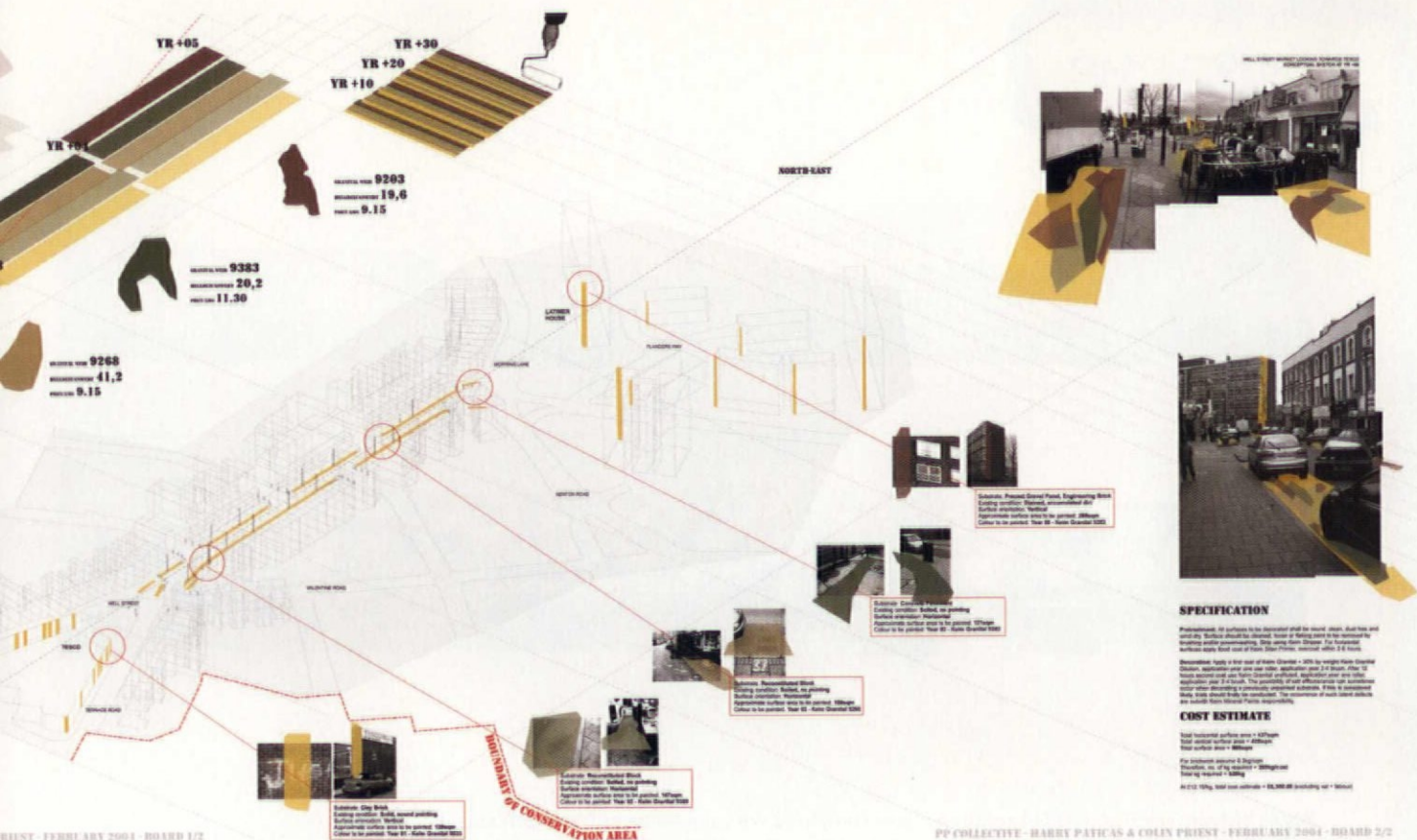
The ceiling is constructed from concrete beams with prefabricated reinforced concrete with panels and walls made up of randomly coloured walls. The walls and ceiling of the tunnel are for the most part black. Each tunnel is 11 metres wide and 6.2 metres high.

Colourful lights are used to illuminate the tunnel although this may change with proposals for Improved Lighting from Transport for London. The number of lights varies from the start to the end of the tunnel. It takes approximately 10 seconds for eyes to assimilate to the drop in lighting levels and therefore the number of lights is greater at the start of the tunnel and drops off as the driver passes through. The colours of the lights gradually reduce towards the end of the tunnel.

The proposed design and associated specifications of the paint 'Keim Revolution' is suitable for the heavily polluted environment of the tunnel.

Diagram to show shape exterior









## wrad

**T**he team at WRAD tackled a section of east London's Brick Lane, between Bacon Street and Bethnal Green Road. This includes two beigel shops that operate 24 hours a day. With no tradition of painting buildings in this part of London, WRAD chose a contemporary abstract pattern, employing five colours, to give some unity to the area and its generally undistinguished buildings. It deliberately chose colours that would retain their contrasts under streetlights. The one building of quality, the Jolly Butcher pub, would remain unpainted.

## east lothian

**A**rchitects and planners from East Lothian council chose the town of Haddington as their subject. Haddington still has its original High Street, which is known for its colourful painted buildings. The East Lothian team has devised a new co-ordinated colour scheme for the High Street, encompassing about 100 buildings. The best of the existing painted treatments would be retained, with colours on newly painted buildings balanced carefully to enhance the street as a whole.







## muir associates

**W**orking in association with Perth & Kinross Heritage Trust, Muir

Associates proposed the revitalisation of an 18th-century tenement block in Perth city centre. The building, which had been the home of famous artist and engraver Thomas Octavius Hill, is in a pivotal position on the axis of George Street and the High Street. The proposal was to paint and apply frescoes using Keim Paints' historic portfolio of work to produce something in keeping with the history of the building.



The Streets of Colour awards were set up to mark the 125th anniversary of Keim Mineral Paints, and were run in association with *The Architects' Journal*. Entrants were asked to think of a street or part of a street that they felt needed repainting or restoring. They were asked to propose a colour scheme and/or colour treatment, using Keim Mineral Paints. All schemes had to be supported by the local authority, as the intention is to implement the winning scheme.

## judges

**Paul Finch**, editorial director, *The Architects' Journal* (chair)

**Cezary Bednarski**,  
Cezary Bednarski Architects

**Helen Hughes**,  
English Heritage

**Will Alsop**, Alsop Architects

**Gareth Davies**,  
managing director,  
Keim Mineral Paints





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## London

**New City Architecture** 21 May-2 July.

An exhibition at Finsbury Avenue Square, Broadgate, EC2. Details [www.newcityarchitecture.com](http://www.newcityarchitecture.com)

**Nigel Coates** Thursday 27 May, 18.30.

A lecture at the AA, 36 Bedford Sq, WC1. Details 020 7887 4000.

**The Shape of London** Thursday 27 May,

19.00. The AJ/Architecture Foundation mayoral debate with all four candidates. At the Queen Elizabeth Hall, South Bank Centre. Tickets £6 from 08703 800 400.

**Indoor Type: Michael Samuels** Until

28 May. An exhibition at the AA, 36 Bedford Sq, WC1 (020 7887 4145).

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**Eva Jiricna** Wednesday 2 June, 19.00.

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**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.

**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](http://www.livablecities.org)

**Alfonso Vegara** Wednesday 16 June,

18.30. The Urban Design Group's Kevin Lynch Memorial Lecture at The Gallery, 77 Cowcross St, EC1. Details 020 7250 0892.

**Shopping in the City** Wednesday 30

June. An AJ conference at the RSA, WC2. Details 020 7505 6044

([www.shoppinginthecity.co.uk](http://www.shoppinginthecity.co.uk)).

**Archigram** Until 4 July. An exhibition at

the Design Museum, Shad Thames, SE1. Details 0870 833 9955.

## East

**Peter Cook** Tuesday 25 May, 19.30. A

lecture at the De Havilland Campus, University of Hertfordshire, Hatfield.

Details 01971 789882.

**resource04** 7-10 June. An exhibition

of energy efficient technologies at the BRE, Garston, Watford. Details 01923 664525.

**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.

## East Midlands

**Paper** Sundays, 14.00-18.00, until

6 June. Works on paper by four artists at Fermynwoods, nr Brigstock,

Kettering. Details 01536 373469.

**Hooked on Books: The Library of**

**Sir John Soane** Until 30 August. An



### NATURE TRAIL

Dalziel + Scullion's lightbox photographs, made in collaboration with botanist Hugh Ingram, explore landscape by examining sites of scientific importance, such as rock pools, forests and limestone plateaux. At Houldsworth, 33-34 Cork Street, London W1, until 3 July. Details 020 7434 2333 ([www.houldsworth.co.uk](http://www.houldsworth.co.uk))

exhibition at the Lakeside Arts

Centre, University Park, Nottingham.

Details 0115 846 7777.

## North

**Fantasy Architecture** Until 3 July.

An exhibition at the Northern Gallery

for Contemporary Art, City Library,

Sunderland. Details 0191 514 1235.

## North West

**Architecture and Ideology; Best Studio**

**3 (Arkheion)** Until 29 May. Two

exhibitions at CUBE, 113 Portland St, Manchester. Details 0161 237 5525.

**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

**Immaterial: Brancusi, Gabo, Moholy-**

**Nagy** Until 23 May. An exhibition at

Southampton City Art Gallery.

Details 023 8083 2153.

**RIBA CPD Event: How Much Could The**

**DDA Cost You?** Tuesday 25 May, 16.00.

At Clarks Solicitors, One Forbury Sq,

Reading. Details 0118 969 8051.

**Mike Nelson** Until 4 July. An

architectural installation at Modern

Art Oxford, 30 Pembroke St, Oxford.

Details 01865 722733.

## South East

**Building Visit: Butterfly House**

Thursday 27 May, 17.00. At Dunsfold

nr Godalming. Cost £15. Details

01892 515878.

**Katherine Clark (muf)** Thursday 27

May, 17.30. A lecture at Kent Institute

of Art and Design, Canterbury. Details

01892 515878.

**Wine & Design: Follies of Painhill Park**

Wednesday 2 June, 17.00. Guided tour

and wine tasting. Near Cobham.

Details 01892 515878.

**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.

**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](http://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

**Elizabeth Magill** Until 23 May.

An exhibition at the Ikon Gallery,

Birmingham. Details 0121 248 0708.

**RIBA CPD Event: Problems in**

**Architectural Practice** Thursday

27 May, 14.00. A seminar at

Birmingham. Details 0121 233 2321.

## Yorkshire

**With Hidden Noise** Until 8 August.

An exhibition at the Henry Moore

Institute, 74 The Headrow, Leeds.

Details 0113 234 3158.

## Scotland

**Interim MFA** Until 28 May. An

exhibition at Glasgow School of Art.

Details 0141 353 4500.

**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 Jurys Hotel, Cardiff. Details 0121

434 3337.

## International

**Giancarlo De Carlo** Until 14 June.

At the Pompidou Centre, Paris. Details

[www.centrepompidou.fr](http://www.centrepompidou.fr)

**Lausanne Jardins 2004** 19 June-

17 October. Various temporary

gardens in and around Lausanne.

Details [www.lausannejardins.ch](http://www.lausannejardins.ch)

**Content: Rem Koolhaas - OMA - AMO**

Until 29 August. An exhibition at the

Kunsthal, Rotterdam. Details

[www.kunsthal.nl](http://www.kunsthal.nl)

**Jørn Utzon** Until 29 August. An

exhibition at the Louisiana Museum,

Humelbaek, nr Copenhagen. Details

[www.louisiana.dk](http://www.louisiana.dk)

Information for inclusion should be sent to

Andrew Mead at The Architects' Journal at

least two weeks before publication.





# User friendly

CHARLOTTE ELLIS

**Giancarlo De Carlo: Des Lieux, Des Hommes**

At the Pompidou Centre, Paris, until 14 June (and then to Geneva, Brighton and Rome).  
Eponymous French language book co-published by Centre Pompidou/Edition Axel Menges, €39.90

Giancarlo De Carlo – architect, multi-talented *uomo universale*, and thoroughly good egg – was to have taken part in a debate about his work when this Pompidou Centre show opened. Unhappily, ill health prevented him from doing so, but he did send a request:

'Don't talk too much about Urbino, I am not only Urbino.' In fact, the most enlightening contribution to the ensuing discussion came from a former ILAUD (International Laboratory of Architecture and Urban Design) workshop student, who had failed fully to

appreciate De Carlo's gifts as a teacher until he tried to run a summer school himself – to his surprise, this proved to be *très difficile*.

The Pompidou Centre recently landed a catch of sketches, drawings and models from several different points in De Carlo's career (some donated, some purchased). These new acquisitions and other material, including a long video interview recorded earlier this year and various loans, are deployed with considerable skill to give an overview of De Carlo's trajectory from the late 1940s to today.

A larger-than-life De Carlo delivers two illustrated tutorials in French in different parts of the gallery. Edited extracts from the recent



video interview, inter-cut with audio-visual sequences on specific episodes, designs and buildings, deal separately with his early work and with more recent buildings and projects. Related models, drawings and artefacts are grouped within easy range, so they can be readily placed in the context of his discourse and better understood.

Plans and a model for the steelworkers' housing at Terni (1969-74), for instance, immediately acquire added interest and meaning when seen in the light of De Carlo's description of the participation process that informed his designs, and later film footage showing the built project after users had transformed their terraced balconies into flourishing gardens (see picture).

Similarly, as numerous image-obsessed imitators have made his Mazzorbo island housing (1979-85) look so hackneyed at second hand, it is salutary to be reminded that this modest development was designed to meet local housing needs and to be as inconspicuous as possible when seen across the lagoon from Venice.

De Carlo's activities as writer, editor and polemicist are represented by back numbers, first editions and archive photographs, while didactic entertainment is provided by a silent knockabout comedy film entitled *Una lezione di urbanistica*, which he made with Billa Zanuso for the Milan Mostra dell'Urbanistica of 1954.

The ILAUD summer workshops De Carlo founded in 1976 are represented on video, while his work as an architect and urbanist in Urbino from the 1950s has certainly not been overlooked (AJ 13.2.03). A number of De Carlo-designed chairs are also on show, among them a delightful Ratan chair (1959) and the equally endearing Xenitia chair (1992), produced for the Faculty of Letters lecture hall at Catania University, Sicily.

One way or another, the breadth and depth of De Carlo's multifarious activities – and a palpable sense of his integrity, commitment, perseverance and charisma – are evoked in an exhibition that is neither exhaustive nor exhausting but refreshingly low-key.

Conversely, the book published in lieu of a catalogue seems to have been thrown together in haste. The type is tiny and the illustrations disappointing. It contains introductions by Frédéric Migayrou, Denis Dubois-Ferrière and Jacqueline Stanic, some four-dozen project descriptions, 10 long essays by John McKean (in French translation) and a bibliography, but no index.

*Charlotte Ellis is an architectural writer in Paris.*

## Open to ideas

JONATHAN HALE

### AHRA Research Student Conference

At the Department of Architecture, University of Westminster, on 7 May

This one-day conference was the inaugural event of a new organisation – the Architectural Humanities Research Association (AHRA). The idea behind AHRA is simple: to promote research in the area of architectural humanities in a way unattempted before.

The subject area is deliberately broad and covers a range of sub-disciplines such as architectural history, theory, culture, design and urbanism. The primary 'audience' is made up of those responsible for funding research across the higher education sector, such as HEFCE (Higher Education Funding Council for England) – via the infamous Research Assessment Exercise (RAE) – the Arts and Humanities Research Board (potentially one of AHRA's main supporters, but currently lacking a clear architectural remit), and other research sponsors and users, including the construction industry itself.

Far from being just another 'talking shop', AHRA clearly has some big fish to fry. Having said that, talking is still important, and that is basically what this first event – organised by Professor Murray Fraser and his team at Westminster – was for.

An open call for papers asked PhD students in architecture to propose 20-minute presentations of a portion of their doctoral research. No one knew what sort of response to expect, so it was a pleasant surprise to get 36 submissions from universities right across the country.

This gave the panel of referees a little extra work to do, but a key aim of AHRA is to set a 'gold standard' in terms of quality. Selection was therefore ruthless, and many good students were not chosen. As this event is planned to be the first of many, hopefully most of those missing out this time will get another chance. Three broad themes helped to focus the discussions: 'subjective experience of space', 'reinterpreting the city', and 'cultural meaning and representation'.

The first set of papers brought out another subtext to the day's proceedings: an attempt to encourage students developing less-conventional models of research, that might start to question the traditional definition of the doctoral thesis.

Both Lilian Chee (Bartlett) and Betty

Nigianni (East London) are doing what might be labelled 'psycho geography', using various popular cultural and literary sources to build up a richly layered method of analysis. Hilary Powell (Goldsmiths), from the second group, showed further possibilities of practice-based research; in her case, fine-arts practice in relation to architectural space.

The final group threw up perhaps the most contentious questions, to do with the limitations of the 20-minute paper taken out of context from the PhD project.

Francesco Proto (Nottingham) fell victim to the 'manifesto' tendency, without properly declaring his sources, while Mike Maddens' (De Montfort) perhaps too heavily referenced account of architectural hermeneutics laid a strong foundation for an argument there wasn't actually time to build.

But both Florian Kossak (Edinburgh College of Art) and Jon Goodbun (Westminster) delivered impressively well-structured papers, the first on architectural exhibitions and the latter on the philosophy of technology.

Introducing the day, Adrian Forty of the Bartlett highlighted the potential of more collaborative models of research, making the comparison with the physical sciences where research is more of a 'management' process: teams of junior researchers producing the data and often also writing it up.

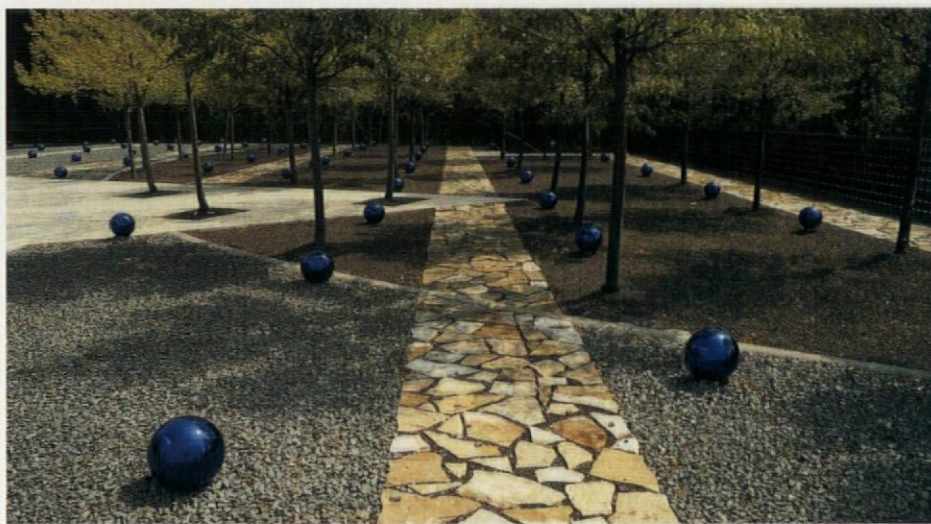
In conclusion, David Dunster struck a more caustic note, ambitiously exhorting listeners to save the architectural profession from the encroachment of the chartered surveyor.

One issue that does fall within AHRA's remit is the problem of academic jargon, although Dunster's claim that ideas can and should always be expressed in accessible everyday language surely wouldn't find much favour in the sciences, particularly where innovative research is concerned.

Overall the event was a success on many levels, not least in getting people talking. Communication within the research community has been notoriously stilted over the years, but now with AHRA this community at last has a voice.

*Jonathan Hale is an architect and lecturer at the University of Nottingham. For more details on AHRA, he can be contacted via email at [jonathan.hale@nottingham.ac.uk](mailto:jonathan.hale@nottingham.ac.uk)*





Detail of Exchange Square, Manchester.  
Above: a gridded scheme in Virginia

## Self expression

RICHARD WESTON

### The Vanguard Landscapes and Gardens of Martha Schwartz

Edited by Tim Richardson. Thames & Hudson, 2004. 224pp. £36

Martha Schwartz has a mission: to make landscape architecture 'a medium and a vehicle for personal expression, much as a painter would view a box of paints'. Given the expressive delights now on offer in many a garden makeover show, this might be thought a done deal, but when she was at university the landscape profession in the US was dominated by an ecology-inspired model that saw 'art' as a capricious diversion.

Schwartz came to fame – or notoriety – early. In 1979, while her then partner Peter Walker was away on a business trip, she transformed their politely formal garden in Boston's Back Bay with rows of neatly spaced bagels. Documented like a 'proper' project – rendered plans, working details, large-for-

mat photographs – this critique of 'the artistic malaise' afflicting the profession was soon on the cover of its industry magazine, *Landscape Architecture*.

Bagels were, Schwartz explained with mock seriousness, freely accessible, low on maintenance, and flourished in the shade. It may have begun life as a practical joke, but the Bagel Garden epitomised Schwartz's emerging style, combining a love of patterning the ground learned from Le Nôtre via Walker, debts to land art and Minimalism encountered at art school in Michigan – colourful, Robert Smithson-inspired containers are a recurring device – and a trademark sense of humour. Hence, the fountain of 350 gold-painted frogs in Atlanta, the giant con-

crete cones and zebra crossings of the Hyper Highway at Disneyland, and the sinuous benches, arranged like the broderie of a French parterre, that replaced Richard Serra's *Tilted Arc* at New York's Jacob Javits Plaza.

Many of Schwartz's projects have the self-consciousness and temporary quality of installations – and some of her best actually are installations. The Turf Parterre Garden that folds up across the gridded elevation of Cesar Pelli's World Financial Centre, for example, is a witty critique of the inappropriately suburban character of Battery Park City.

Permanently installed, such commentaries raise different questions. The 'quick, cheap and green' roof garden for the Whitehead Institute for Biomedical Research – an assemblage of astroturf and aquarium gravel, raked in Japanese Zen style – just about works. But at the Davis Residence in Texas, the allusions verge on the vacuous, even offensive: a cone of gravel is intended to conflate the Rocky mountains and local slagheaps, while a Minimalist grid of spikes purports to 'refer' to the barbed wire at the nearby Mexican border.

Translated to the public realm, similar attempts to build in 'meaning' can be even more problematic. The drumlin-shaped mounds and drifting logs of the Courthouse Plaza in Minneapolis are elegant, but I'm not sure if even they – like those endlessly squirting frogs – serve well the casual, repeated encounters of everyday life. Despite her obsession with meaning, Schwartz is at her best working abstractly – nowhere more so than in the recent Swiss Re headquarters in Munich. The strips of colour may allude to the ploughed fields that previously occupied the site, but this 'reading' is not intrusive and they work well as a counterpoint to the cool Modernist building.

As befits its subject, the book is in Thames & Hudson's new 'jolly' style – filled with photographs, woefully light on drawings, and with minimal, uncritical, texts. The 'vanguard' of the title and the bold claims on the dust jacket lead one to expect a stronger argument.

Schwartz is clearly a gifted designer, but her view of art appears to be rooted in an expressionistic model that is both shallow and, as a paradigm for making public places, misguided. Pursued so literally, the search for meaning has more in common with the advertising industry than with the complexity of authentic artistic images. Any painter who was so wilful with his/her box of paints would merit no more than 15 minutes of fame.

Richard Weston is professor of architecture at Cardiff University.

● See Martha Schwartz profile on pp22-23



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## people & practices

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**Gianni Botsford Architects** has moved to 5th Floor, 83-84 Berwick Street, London W1F 8TS.

**RyderHKS's** London base has moved to 7 Soho Square, London W1D 3QB.

**Jayne Magowan** has joined the TPS Consult architectural team as an associate.

**Chris Goldthorpe** has left **Gardiner & Theobald** to become managing director of **Sense**, an independent construction cost consultancy within the **Mace Group**.

**Pollard Thomas Edwards Architects** has opened a new office in Liverpool at Unit S204 Second Floor, Merchants Court, Derby Square, Liverpool L2 1TS.

**Stephen Maddalena**, chairman and joint chief executive of **The Marble Mosaic Company**, has succeeded **David Walker** as chairman of the **Architectural Cladding Association**.

**Dieter Kleiner** and **Rahesh Ram** have been promoted to associates at the London office of **Hudson Architects**.

The new address for **Caro Communications** is 19/20 Great Sutton Street, London EC1V 0DR.

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

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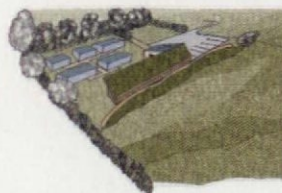
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We are also setting up another small office in Sheffield, and require both a Part III Architect and Part II Assistant.

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Central London

Ref:AJW040517A

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## 03/06/04 BOOKING DEADLINE ALTERATION

Due to the 31st of May bank holiday the booking deadline for the 3rd of June issue will be 5 pm on Friday 28th May.

For Further details please call  
Charlie Connor  
on 0207 505 6737 or  
Email [charlie.connor@emap.com](mailto:charlie.connor@emap.com)



**Recruitment enquiries**

Charlie Connor  
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Email: charlie.connor@emap.com

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**Deadlines**

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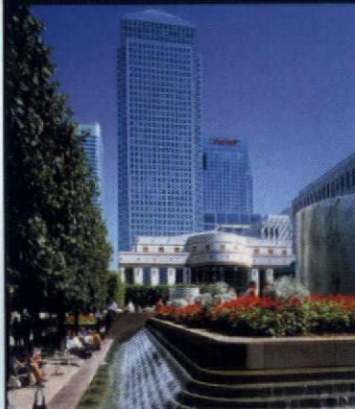
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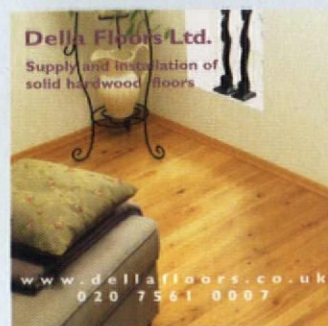
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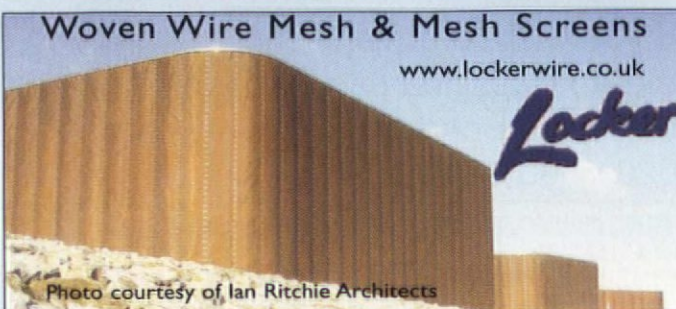
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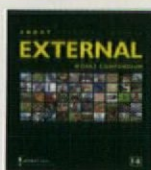
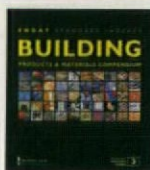
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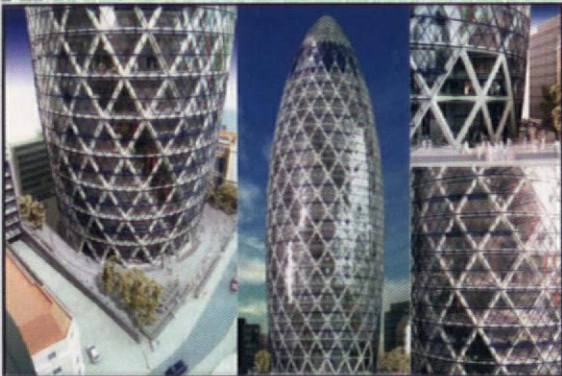
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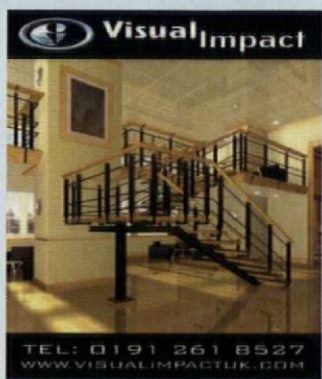
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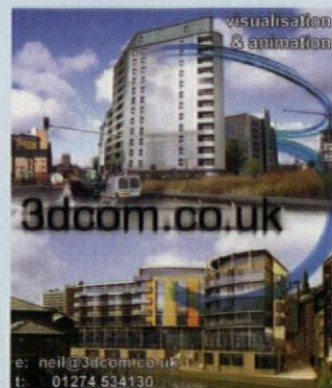
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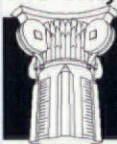


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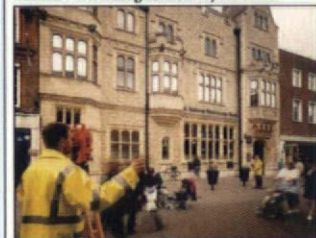
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## Glass distinction

**T**he Future Systems 'Glass House' in Islington was an instant hit when it was designed a decade ago, and plaudits poured in. Those adulatory snippets were put to good effect by Messrs Hamptons, estate agents to the gentry, in its recent catalogue for the house. 'One of the best houses in the world' – *El Pais*. 'This house is already a classic' – *Vogue*. 'An astounding piece of architecture and we can't get enough of it' – *Wallpaper*. Who could fail to be impressed by all this? Well, another architect, you might think; perhaps one with reservations about the orientation of the dwelling – is it (whisper this) the *wrong way round*? From an orientation point of view, possibly; on the other hand, it does have a proper street entrance and aspect. Anyway, the latest owner is an undeterred architect: **Roger Kallman**, urbane standard-bearer of the SOM flag in London these many years, and already an Islington resident. He took the purchasing plunge a few weeks ago, and some redecoration is now under way. Watch out for the influence of Kaplicky and Leveté's 'space-age aesthetic' (Martin Pawley) to infiltrate SOM's oeuvre.

## Image builder

**M**y attention has been brought to a recent article by one of the candidates for the London mayoralty, **Stephen Norris**, in *Property Week*. In it, he suggested that CABE should be abolished on the grounds that we do not need 'a pompous collection of the great and good to tell us what constitutes decent architecture'. Fascinatingly, he tells us he doesn't like the Lloyd's Building or Norman Foster's Swiss Re, but that the latter is 'redeemed' by the British Museum. He also suggests that planners must have been on drugs when they gave consent for the buildings he (Norris) doesn't like. It doesn't stop there; in a reference to the audit of CABE's governance currently grinding away, he says Sir Stuart Lipton 'might reflect that, in public life, perception is as important as reality'. Well, how

## 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 (AJ 13.5.04) winner was Steve Hodgson of Minehead. The never-built scheme was *Highrise of Homes* (1981) by James Wines/SITE.**

about the common perception of Norris as an overweight Tory Lothario with a credibility problem? Or that a man who claims that 'saboteurs' were responsible for a train crash caused by poor track maintenance by a company he now chairs, isn't fit to run the public lavatories in Leicester Square, let alone become mayor of London.

## Debate time

**I** see that Norris, along with **Ken Livingstone** (Labour), **Simon Hughes** (Lib Dem) and **Darren Johnson** (Green), will be appearing in an Architecture Foundation debate at the Queen Elizabeth Hall on Thursday 27 May (details 08703 800 400 or at [www.rfh.org.uk](http://www.rfh.org.uk)). The AJ is the media partner for the event, which promises to be one of the biggest public debates on architecture since the foundation's London events seven years ago. Inevitably there will be much talk about the need for more housing. Astragal hopes someone will ask a simple question: will any of the candidates pledge to ban new development on flood areas prior to agreement on where the new flood defences will be located? This is an issue no-one wants to talk about. Of course,

you could build on flood plains but you would need homes of a very different design. Who will enforce this?

## Vodka tonic

**V**odka is not a subject that has previously attracted architectural attention, though it has attracted the attention of architects, if you see what I mean. That is now changed, since no less a figure than **Frank Gehry** has designed the latest bottle for Wyborowa, the Polish distiller owned by Pernod Ricard USA. Is there no limit to Gehry's skills? Perhaps there are, if a story in the Boston globe is to be believed. It reports on the final stages of work on Gehry's new building for MIT, a computer information and intelligent sciences centre. One professor is quoted as having already called in an interior architect to sort things out. 'People don't know how to live in this building,' declares professor Harold Abelson, whose office as finished appeared to be a student lounge.

## Ten is enough

**W**hile the AA ponders its immediate future without a chairman,

news of **Mohsen Mostafavi's** appointment as Dean of Architecture at Cornell has excited the **Cornell Daily Sun**. It notes Mohsen's exemplary qualifications for the job, and that he was the first choice to replace **Porus Olpadwala**, according to provost **Biddy Martin**, who headed the selection committee. But Martin says she agrees with those members of the AA school who felt 10 years was long enough for a chair, and who either voted against Mohsen's automatic reappointment, or abstained in the recent election: 'We rarely have deans who serve 10 or more years.' Still, she also commented that 'I don't feel fazed in the least by what happened at the AA. I think he's amazing and I think we're very lucky.'

## Cambridge blues

**O**ur old friend **Gavin Stamp** starts a new architecture column for the revamped monthly arts magazine *Apollo* in typically trenchant style. Returning to Cambridge University 30 years after his graduation, Stamp finds 'much remains the same, and unfortunately this includes the result of one of the greatest aesthetic scandals of the past century – the mutilation of the interior of the east end of King's College Chapel to incorporate Rubens' painting *The Adoration of the Magi*'. Stamp uncovers a sorry tale in which the victims included Maguire & Murray, which had no option but to resign when provost **Noel Annan** forced through his 'barbaric' proposal. With King's now strapped for cash, Stamp has a solution: sell the Rubens and use the proceeds to make the college solvent again as well as restoring the original east-end floor levels and missing panelling. 'Can King's be shamed into behaving decently?' he asks. Don't hold your breath.

## Forewarned

**D**ateline Monday 17 May; **Jonathan Glancey** in the *Guardian*: 'So, 20 years ago today, the **Prince of Wales** famously opened his attack on modern British architecture ...' Actually the attack was launched on 30 May. Premature again!

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HansenGroup company PollardsFyrespan is a specialist commercial door manufacturer with long experience of supplying standard and bespoke revolving door installations to clients across many sectors. The company can

now fabricate doors up to 3m in diameter using its ColourLine suite of aluminium extrusions that feature an anodised or polyester powder-coat finish. For a product guide from PollardsFyrespan call 020 8443 5511 or email: [sales@pollardsfyrespan.co.uk](mailto:sales@pollardsfyrespan.co.uk)



## SCANDINAVIAN WINDOW SYSTEMS

**AJ ENQUIRY NO: 203**

The Olsen door from SWS offers architects and designers one of Europe's largest ranges of timber sliding doors. The Olsen door is made with laminated Swedish redwood for stability and strength, and can be supplied pre-finished with a choice of over 1,000 factory-applied paints or stains, with an option for external aluminium cladding. The system accommodates glazed units up to 36mm thick, offering the ability to provide acoustic or specialist units to specification. The operating mechanism provides maximum security as standard.



## KALWALL PROJECT OF THE WEEK

**AJ ENQUIRY NO: 204**

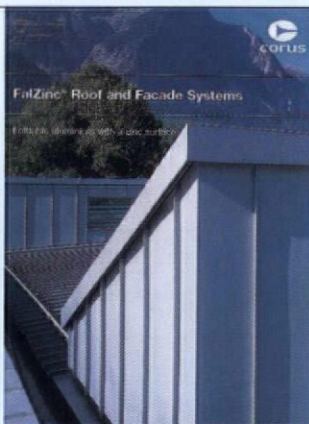
Light-diffusing projects using Kalwall are getting increasingly elegant. This beautiful roof graces the atrium of South Tees Hospital (architect HLM Associates). Here, Kalwall's characteristics are exploited to encourage museum-quality diffused daylight to flood the interior without shadows, hot spots or glare and, unlike glass, virtually eliminate maintenance and cleaning. Elsewhere, HLM has used Kalwall for walkway canopies. Tel 020 8660 7667 or visit [www.stoakes.co.uk](http://www.stoakes.co.uk)



## CORUS BUILDING SYSTEMS

**AJ ENQUIRY NO: 205**

FalZinc has developed a new 12-page full-colour brochure that is packed with information on the unique FalZinc roof and facade systems. Combining the intrinsic benefits of the system with suitable applications and advice on how to fit the material, the brochure has addressed some common questions that specifiers have about FalZinc. The comprehensive brochure also features examples of detailing and system illustrations.



## SIKA

**AJ ENQUIRY NO: 206**

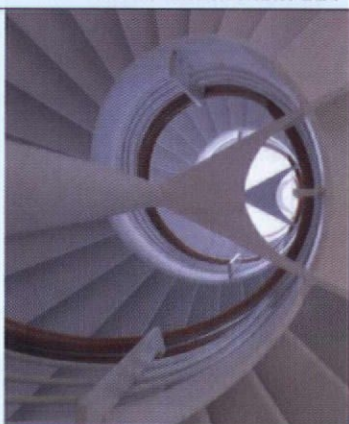
Westgate House, an office building located at Westgate, Halifax, was recently re-roofed using Trocal S, one of the single-ply roofing membranes from market leader Sika. The problem in the re-roofing was that the client required a cost-effective, watertight solution and specified that the re-roofing should not disrupt day-to-day business. The solution from the Trocal team and specialist contractor QM Roofing of Dewsbury was to overlay Trocal S on top of the failed roof to waterproof the structure without stripping off the existing roof.



## WWW.TIMOTHYSOAR.CO.UK

**AJ ENQUIRY NO: 207**

Visit the website of the UK's leading architectural photographer, Tim Soar.



Tel 01842 878773, email [lorna@soargallery.co.uk](mailto:lorna@soargallery.co.uk).

## ARNOLD LAVER TIMBER WORLD

**AJ ENQUIRY NO: 208**

The engineered-products division of Arnold Laver Timber World has recently designed and manufactured a full roof truss package, including roof trusses, infill timbers and bracing, for a Salvation Army building in Leeds. The roof truss package for the new building, which will be used as a day nursery, was erected in just three weeks, with the project only lasting two months from initial concept to fitting.





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