

Extra ordinary.

W/O1 (architecture contents

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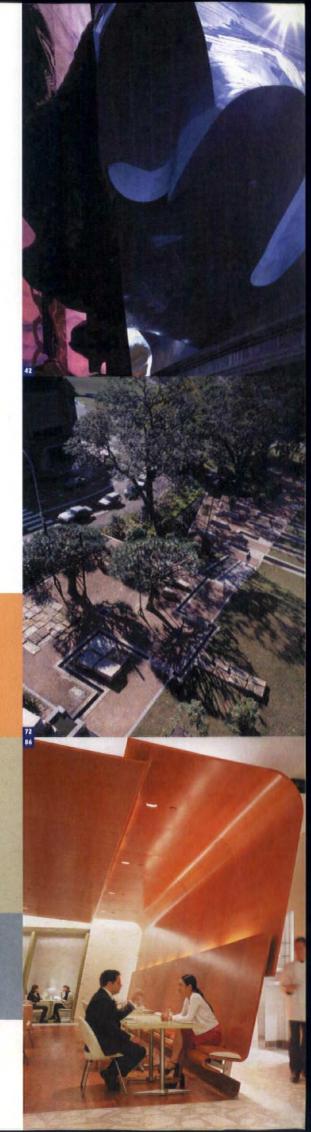
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Cover photograph: Collage of Michael Moran's photograph of the Seagram Brasserie.







Another design classic.

Extraordinary

Why would you ask a mountaineer to speak to a room full of construction industry professionals? This question was on the lips

of many of the delegates at South Africa's principal property convention, Procsa, in Durban at the end of May.

The formula for all these industry conventions is tried and tested; choose a sunny spot with a reasonable choice of hotels and nightlife, stage an expo (from pointlessly small, to totally unnavigable) and wheel out a stream of speakers who (as in the case of this year's AIA fandango in Philadelphia) broadcast to the dozing masses via an impossibly unsubtle Autocue system, as the slide projector flickers in a darkened auditorium. Tried and tested, it may be. Dull, it most certainly is.

Dull, that is, until the hearts and minds of the congregated masses are awoken by a speaker of such dynamic and charismatic proportions as Ricardo Legorreta, this year's AIA Gold Medal winner. His lecture in Philadelphia was unscripted and spontaneous. Never before have I witnessed a standing ovation at a convention.

But back to the mountaineer. The Procsa event benefited from a speaker who left a packed congress hall speechless with admiration and wonder. At 23 years old, Bear Grylls was, and still is, the youngest Briton to climb Everest and return alive. Now 25, he was brought to the convention by his sponsor, international cost consultant to the stars, Davis Langdon & Everest (no prizes for spotting the link).

He leapt onto the stage in his climbing gear and captivated the audience for an hour, without any notes - just slides and video footage of the summit. At the end, delegates swooped on the stacks of his book, Facing up, eager for a signed copy. He had demonstrated the value of teamwork, leadership, luck, persistence, lateral thinking and courage. These few words, he explained, tack that little word 'extra' on the front of 'ordinary'. Such was the power of his presentation there were few professionals that night who didn't believe themselves equally invincible.

Nicola Turner, editor

Bear Grylls will address the winners and guests at the first annual World Architecture Awards with the RIBA, in Hong Kong, June 2001. See inside this issue for your entry form.

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world architecture is published by The Builder Group. The views expressed in world architecture do not necessarily reflect those of The Builder Group. All edi-

torial and advertising enquiries to:

world architecture. The Builder Group, Exchange Tower, 2 Harbour Exchange Square, London E14 9GE,

Telephone: +44 (0)20 7560 4120

Facsimile: +44 (0)20 7560 4191

© The Builder Group. Subscription order to: Tower Publishing, Tower House, Sovereign Park, Lathkill Street, Market Harborough

LE16 9EF, UK.

Telephone: +44 (0)1858 438890

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world architecture ISSN No 0956 9758 is published ten times a year for US\$176 per year. Second class postage paid at Champlain, New York and additional entries. Postmaster: send address corrections to Hyde Park Media, c/o I.M.S. Box 1518, Champlain, NY12919. Printed in England by St Ives, St Austell. Colour repro by Screaming Colour, London.

world architecture, incorporating RIBA International, is received as part of the RIBA membership package for overseas members. Please contact the RIBA on +44 171 580 5533 for membership information.







Thanks, but no thanks

What a pleasant surprise to see Zimbabwe featuring in your magazine (Wa87page33) but what a sad disappointment to read such shallow, glib cliches. How typical of white South African arrogance to dismiss 90% of our architecture at a glance. Why is it that when a black architect designs in High Tech mode he is displaying an inferiority complex, but when a white architect chooses farm bricks and tin sheets to work with he is 'setting a new architectural agenda'?

Personally I enjoy the two, cleverly detailed little buildings featured in this article, but I don't think they show the rest of us up for pompous fools as Mr de Beer implies. Perhaps he should reflect on the fact that the corrugated iron he praises so lavishly is imported from South Africa, whereas the polished granite that he derides is in fact Zimbabwean.

If there is anything to be learned from Zimbabwe's present troubles, it is the need for a culture of tolerance. I am proud that our 'tiny' profession fosters such a healthy diversity, from mainstream commercial work to the kind of 'architect's architecture' that Mr de Beer seems to prefer. Isn't it time we dropped the holier than thou attitudes and treated each other with a little more respect.

From Andy Milburn, Harare, Zimbabwe

St Vitus' dance

Your photograph captioned 'View of Prague Castle...' (Wa86 page 52) is wonderful. Part of the castle appears to be visible to the left, but is completely overshadowed by the unmistakable filigreed silhouette of the gothic choir of St Vitus' Cathedral. The contrast between the attenuated vertical forms of the cathedral's flying butteresses, pinnacles and finials, in the background, and the dynamic tension of the tubular steel diamond latticework of the Orangery in the foreground, appears to pulsate with energy. St Vitus' dance, perhaps?

From Dr Peter Hancock, Maseru, Lesotho

A question of taste

Herzog & De Meuron's skill in turning the Tate Modern (**Wa**87, pages 48-53), a building stuck fast in a bygone age, into a millennial public gesture of such derring-do is undoubted. But we must be careful – the user-friendly layouts and graphics do not, as many suggest, democratise the art within, any more than Ronald McDonald democratises cuisine. Making things easier to swallow does not help us to understand them.

Michael Smith, Norwich, UK

Hold on tight

Congratulations on a splendid redesign of *World*Architecture! The magazine has always been a
must-read in my office. With the new design and
graphics, it will be even more difficult to keep our
copy from walking out the door in the hands of staff
or clients.

From Richard Pennycooke, President, The Lakeshore Group Town Planning Consultants, Toronto, Canada

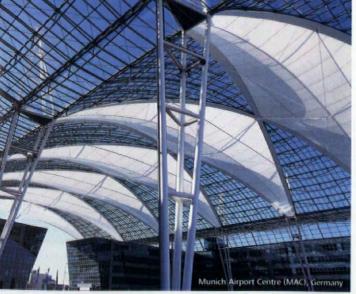


Special issue - Asia

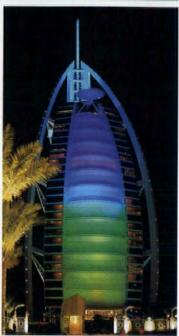
Next issue we will focus on a few examples of what's best about contemporary Asian architecture. Reviews will include Tadao Ando's massive Yumebutai project on Awaji Island, Osaka. Tom Heneghan explores how this work of landscape, architecture and planning aids understanding of Ando's earlier work. Plus, the Pei brothers' pursue their father's legacy with the Bank of China in Beijing, and Toyo Ito lets rip with the Sendai Mediatheque.

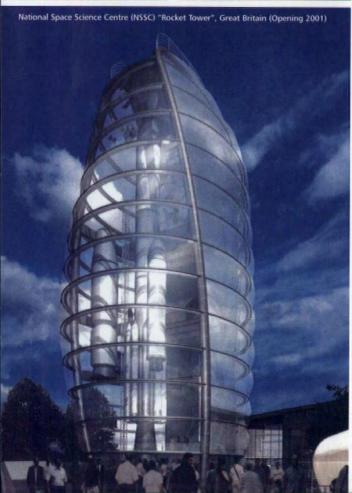
City focus - Singapore

As South-East Asia rebounds after the devastating economic downturn of the last few years, Singapore (above) is producing some of the region's best new architecture. Nicola Turner and Robert Powell report on some of the recently completed buildings including Kerry Hill's Cricket Pavilion and the new polytechnic by New York practice Gwathmey Siegel.









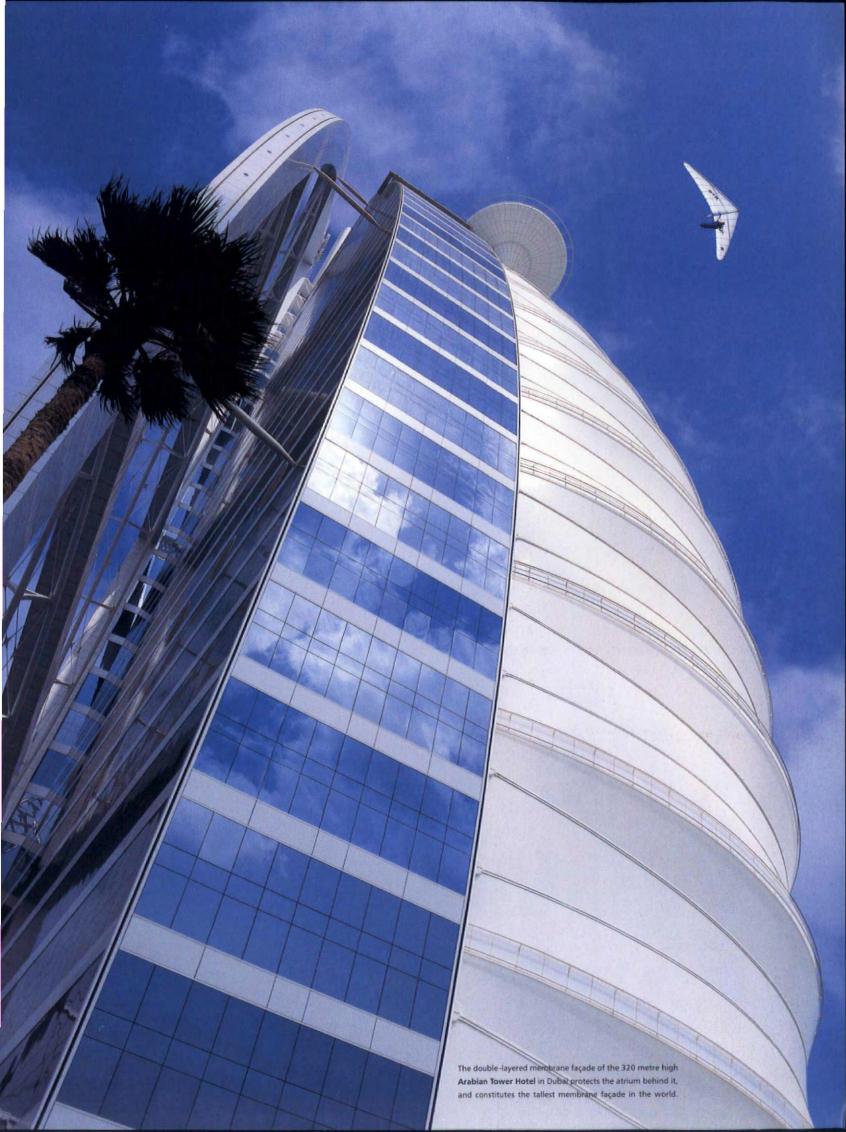
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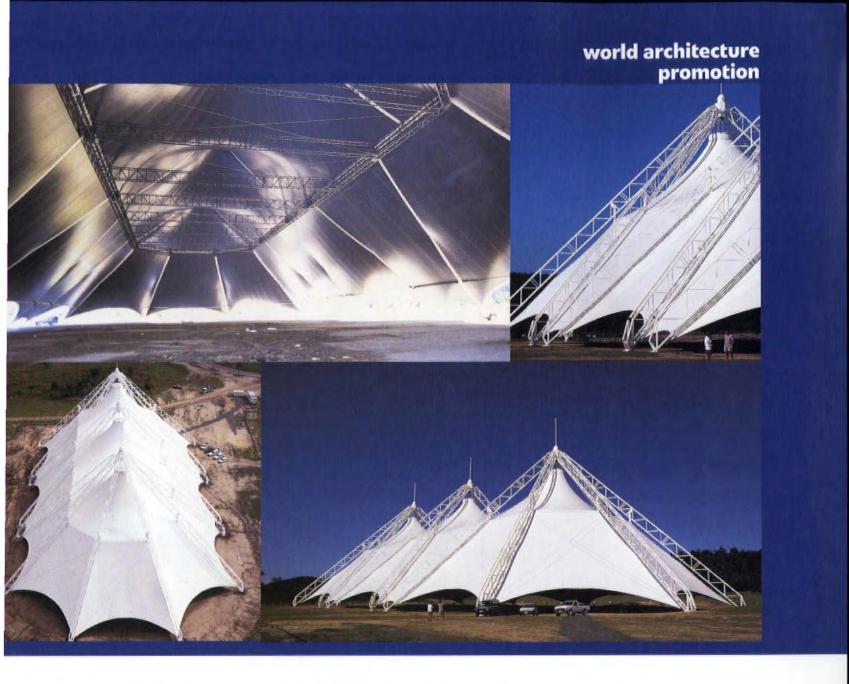
The Wow factor

Whatever you think of London's Millennium Experience, there's one thing everyone agrees on: the Dome itself is spectacular. The sight of a fabric membrane leaping gracefully over a vast area is breathtaking.

Sydney made do with fireworks for its own Millennium celebrations. In Australia, they put their domes to more practical effect, witness the PyramidDOME.

The PyramidDOME is arguably even more advanced than its counterpart in Greenwich. For a start, with an array of built-in electric motors it partly erects itself. 'When you see the PyramidDOME you can't help but feel its magical "Wow" factor,' says PyramidDOME's marketing director Doug Harvey.

As an idea, PyramidDOME originated in Australia in early 1997. The company of the same name, led by managing director David Inscoe, became aware of a key gap in the international market. What was needed was a demountable structure with an exceptionally large clearspan useable space, with an emphasis on speed and



ease of erection and immediate use.

PyramidDOME, conceived as the largest clearspan demountable structure in the world, meets this description admirably, quite apart from the built-in electric inverted chain motors – 19 in the case of a three-dome unit – that hoist the massive membrane. Now, after two years' painstaking research and development it is being launched across the globe.

The PyramidDOME idea is unique: take a unit that spans up to 130m, make it permanent or semi-permanent, make it available in four sizes, and make it retro-fittable – buy a one-dome unit to begin with and you can easily upgrade it later to a two- or three-dome unit just by adding a few more legs (trusses) and membrane panels.

The original early concept was designed for the events and exhibition market. However, the structures have evolved into multi-purpose buildings with generous height and a massive clearspan. The company's largest structure to date is a three-dome unit offering more than 6,200sqm of internal clearspan floor space and a height of

38m to the internal eaves and 17m to the internal production ring truss.

A three-dome unit of this kind can be installed in a mere two weeks following site preparation. Smaller variations provide one and two-dome variants, while at 50m x 50 m and 14m to the truss the PyramidDOME1 Compact is described as 'the baby in the series'.

PyramidDOMEs are manufactured in Australia, the source of all components apart from the PVDF membrane fabric – imported in bulk from Germany – and the electric motors, which originate in France. The company have offices in London and Nice, France, and are looking into the possibility of global manufacture, whether directly or under licence. The current marketing strategy involves China, UAE, SE Asia, North America and South Africa. 'Our marketing potential,' says Harvey 'is global.'



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Putting architecture on the world stage

The excellence of the global science community is recognised by the Nobel Prizes. The film industry has its Oscars. Now the architects and teams responsible for the world's best buildings are to be recognised in the first annual global architecture awards.

Organised by World Architecture, with the Royal Institute of British Architects, the awards will identify the best new buildings from ten regions, across the globe. The awards will also highlight the best buildings by category – from office, industrial and retail, to transportation, education, health, housing and public buildings – and there will be an international "green" award.

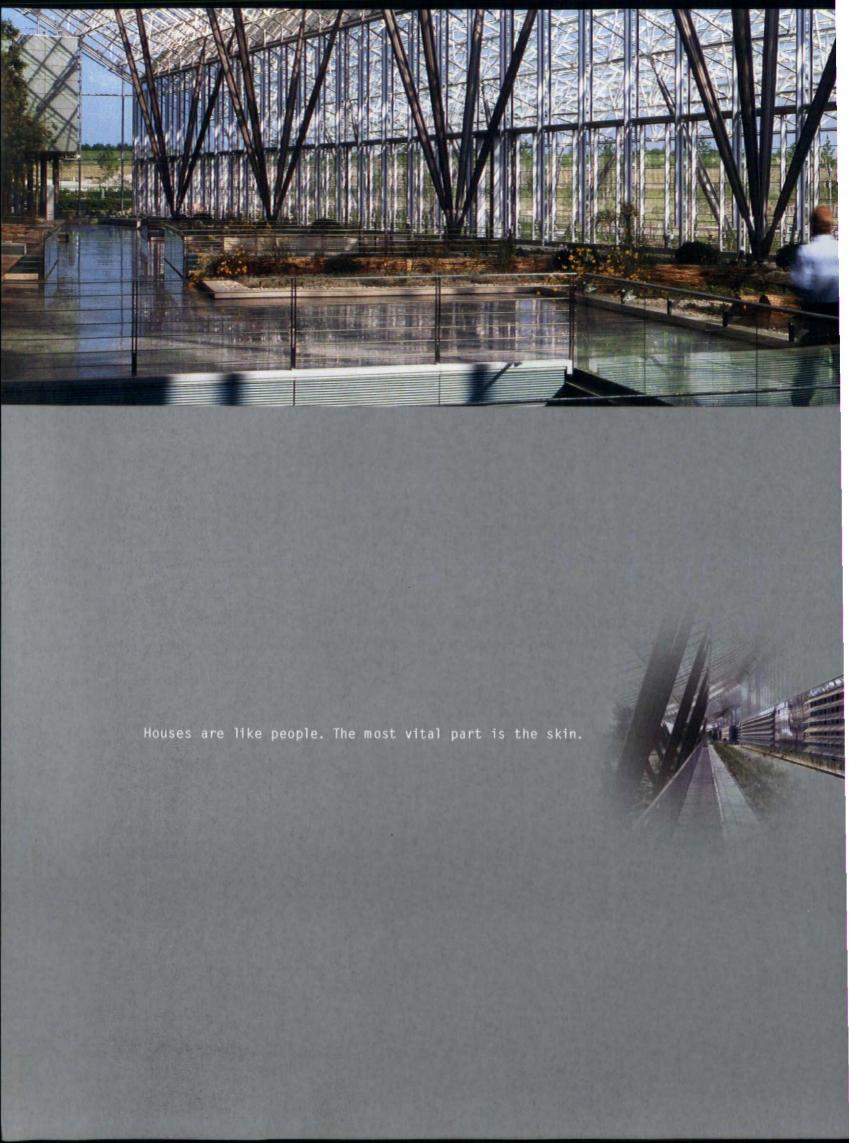
The architects of the top 50 buildings will win an expenses-paid trip to the World Architecture convention and the spectacular awards dinner in Hong Kong in June 2001. And the architect of the best overall building of the year will secure the US\$30,000 Arup World Architecture Prize.

To find out more, or to request an entry form visit our website: www.worldarchitectureawards.org or contact the award co-ordinators at Camargue, Camargue House, Wellington Road, Cheltenham, GL52 2AG, United Kingdom.
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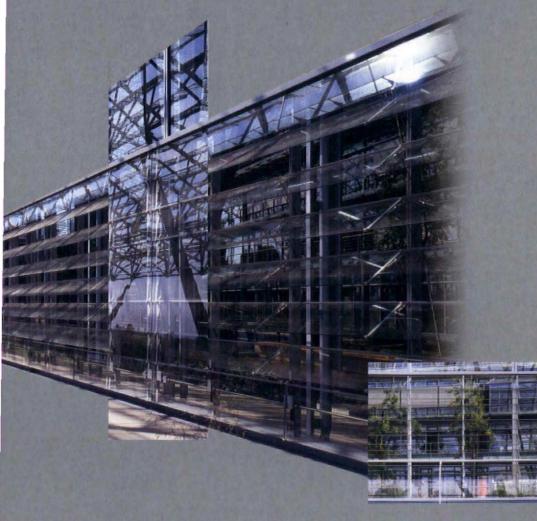
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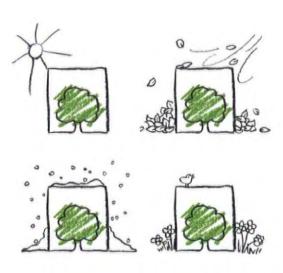
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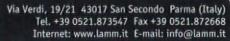
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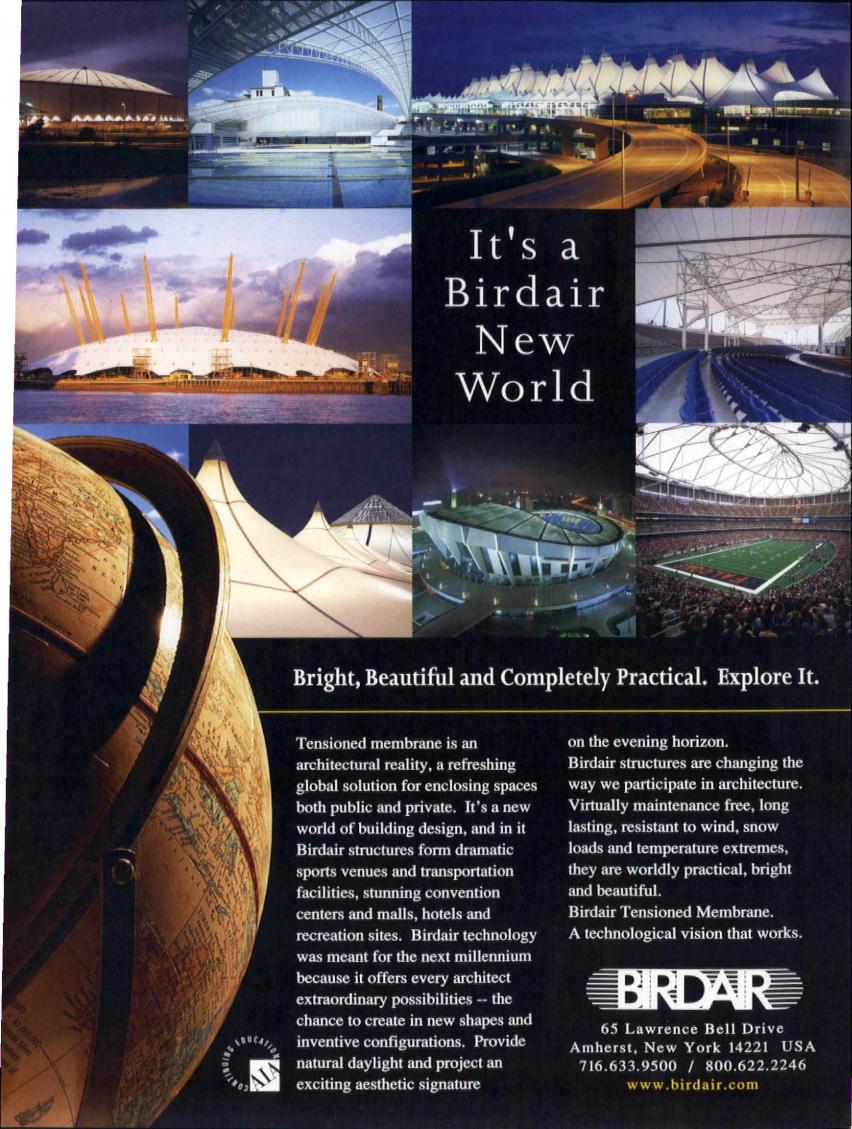
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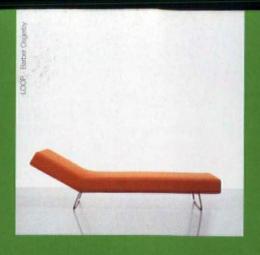
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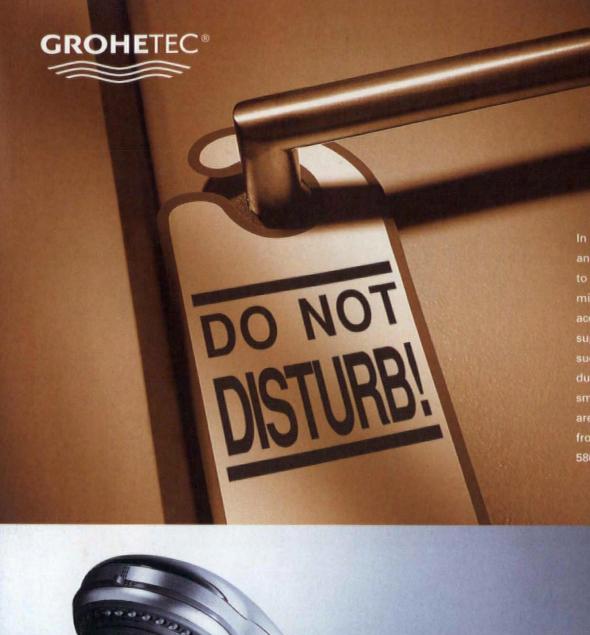
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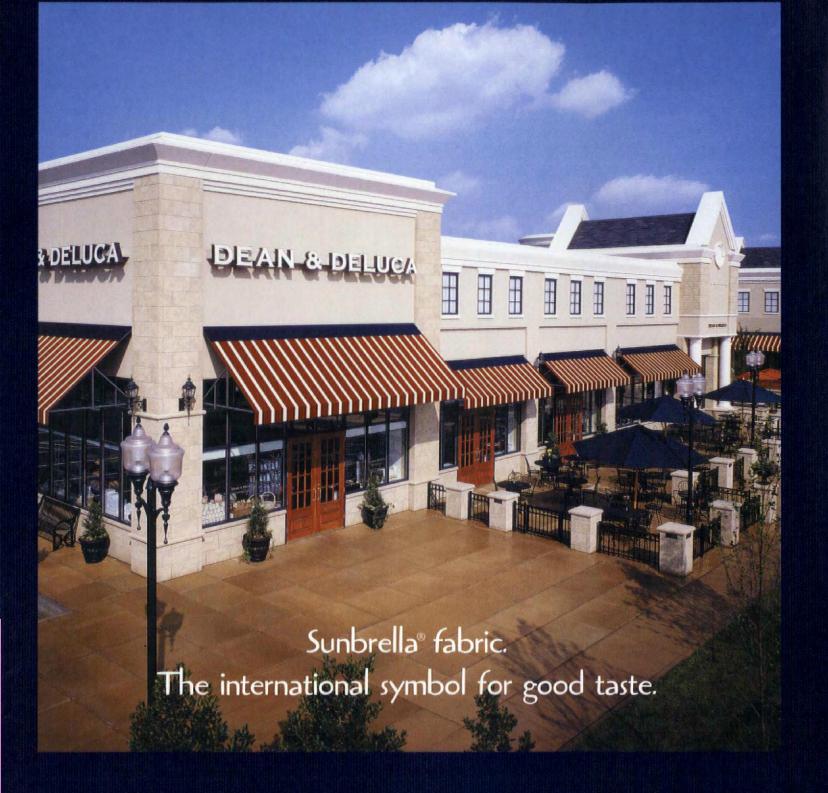


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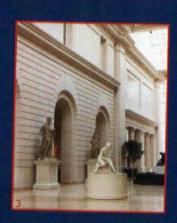
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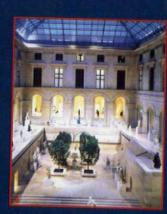
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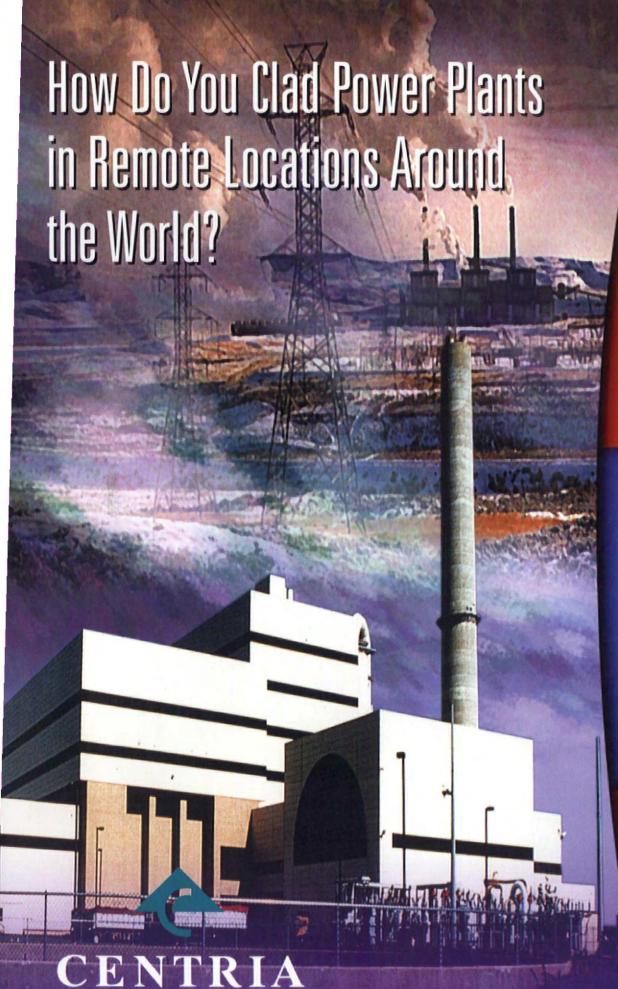
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AUSTRALIA Bondi beach brawl

100 eco-protestors campaign against volleyball stadium

Bondi Beach, Australia's most famous stretch of sand, has been the scene of rowdy protests since early May.

The Bondi Beach Guerrillas (BBG), a 100-strong group of eco-protesters, are campaigning against the temporary, 10,400-seat volleyball stadium which has divided the central section of the beach.

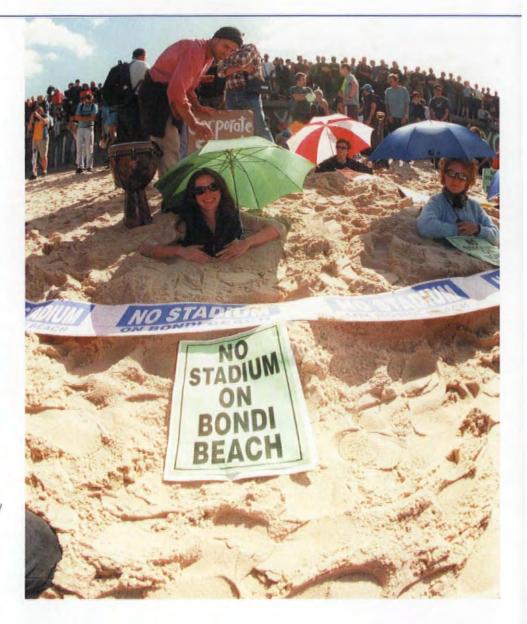
BBG feels that the stadium, designed by the Sydney firm of Daryl Jackson Robin Dyke, will dominate the beach and leave long-term pollutants. The Environment Protection Authority is investigating a discoloured liquid seeping out from the excavation to check for contamination.

The temporary structure will be in place for a year, including construction and remediation time.

As work started on the last of the major Olympic projects in May, 20 protesters buried themselves in the sand. Several were arrested on day one, after they blocked the bulldozers. In other incidents, protesters climbed over construction equipment to halt work, and children broke through fences to play on the huge sand dunes formed by the digging.

Despite the group's failure to stop the work, the confrontation elevated protest leader Lenny Kovner into a local hero. dc/as

(See also Sydney City Focus, page 58.)



GREECE French win at Athens Olympics

But has it all been left too late?

Architecture Studio (AS) of Paris has won the competition to design the Olympic Village for the 2004 games in Athens.

The design – in association with Franco-Greek practice, AAE, (Architectes Associés pour l'Environnement) – comprises over 200,000sqm of accommodation and a training ground to the north of the capital, on a plain extending out from the foot of Mount Parnasse.

Mixed-use commercial blocks, cafés, a swimming pool and individual residences in wood and stone are grouped on to the triangular-shaped site, the axis of which follows an ancient line of wells and canals. After the games the accommodation will provide 10,000 private homes.

The glass-roofed *cité internationale* incorporates a restaurant and shopping areas, press centre and places of worship for officials and the 16,000 athletes.

Both AS and AAE put environmental concerns high on their agenda, with sustainable development and energy conservation central to the design concept. Protecting sites, reducing water consumption and developing a new notion of long-term management of planetary resources are likewise top concerns.

world architecture 88 July/August 2000

Martin Robain of AS admits to being worried that Greece is so late in getting Olympic projects off the ground. It seems that everyone is going to have to work quickly to avert an international fiasco in 2004.

Meanwhile, Architecture

Studio has also won a bid to design three new prisons for the French Ministry of Justice. The contract constitutes a major element of the overhaul of the French penal system. A total of 10 new prisons are to be built, with another US\$50m injected into the renovation of 132 other institutions.



PRC WTO prises China open

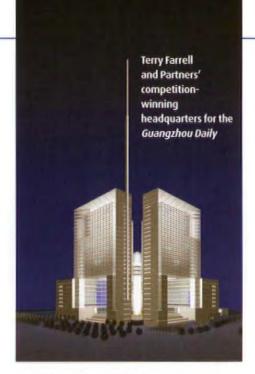
Terry Farrell feels the benefit

Restrictions limiting foreign architects' access to the immense Chinese market may soon be lifted, under an agreement reached between the European Union and the People's Republic of China. The agreement is designed to facilitate China's entry into the World Trade Organisation.

Previously, China has said that foreign architects could only work there if they are based outside the country, and are working in a joint venture agreement with a Chinese practice. With the new agreement, foreign architects will no longer need the co-operation of a Chinese firm to provide building design services from abroad to Chinese clients.

Also included in the agreement is a clause stating that five years after Beijing's accession to the WTO, architects wishing to form a firm in China will no longer need to do so in conjunction with a Chinese joint venture. The Chinese government is also to allow foreign architects to establish firms within China, provided that the firm is formally established as a joint venture with Chinese architects.

In May, Terry Farrell and Partners (TFP) won a competition to design the US\$165m Guangzhou Plaza – a mixed-use scheme which includes the headquarters of the *Guangzhou Daily*, a library, exhibition hall and retail space. It is the largest commission to date by a British architect in China. TFP has also won the contract



for a convention centre in Quing Dao.

Speaking to wa, Steven Smith, director of urban infrastructure at TFP said: 'There are infinite challenges in China because it is growing at an alarming rate and simply because it is so vast. Shanghai is the fastest-growing city in the world and the need for development is great. People need housing, schools, infrastructure, transport systems – everything. As long as the economy continues to thrive, there will be many projects to be done.'

The new rules on access for foreign architects should come into force when China joins the WTO, which is expected by the end of this year. Under the 'most favoured nation' principle, the concessions apply to all foreign architects, even though the deal was negotiated by the EU. **monica dobie**

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USA Prada hires Koolhaas

Rem Koolhaas is working on his first retail commissions. The Rotterdam-based architect has been hired to design three US stores for Prada – in San Francisco, Los Angeles and SoHo, New York.

The commission came about after Koolhaas showed Miuccia Prada, head of the Milanese fashion house, a copy of *The Harvard Guide to Shopping*, a book produced by students at the Harvard Graduate School of Design under Koolhaas's

tutelage. The book, which will be published in the autumn, examines the impact of shopping on contemporary urban life.

Although the Office for Metropolitan Architecture is keeping tight-lipped about design details, early indications suggest that the stores will bear little resemblance to the existing 100 Prada stores worldwide. Speaking to the New York Times recently, an OMA source said that each will contain some form of public space, for more high-minded purposes than buying handbags. For example, at the SoHo store, shoe display space will have seats at night, so that lectures might be held.

The cité internationale, one element of Architecture Studio's scheme for the 2004 Athens Olympic Village

This month

Page 38
Prague's Villa Muller, Adolf Loos'
long-forgotten Modern
masterpiece, has been restored to
its former glory.

page 39
The island of Mallorca is the unlikely setting for an artist's studio designed by Daniel Libeskind.

page 40

Autostadt – a vehicle theme park, in northern Germany. Not a recipe for quality architecture, you might think.

CZECH REPUBLIC Prague 2000 – Adolf Loos villa restored

The Villa Müller by Adolf Loos, one of the pioneers of the modern movement, has been restored to its original, spartan glory. Its reopening is the architectural highlight of Prague's tenure as European City of Culture for 2000.

The villa, in the Stresovice district of Prague, is arguably the purest example of Loos' experiments in interior space planning. Loos, who was notoriously opposed to the use of decoration in design – he wrote an article titled 'Ornament and Crime' (1908) for Neue Freie Presse – sought to explore spatial potential through use of materials, light and forms. Green opaxit glass tiles, white lacquer, green/grey cipollino marble and yellow lemonwood were some of the materials used in the Villa Müller. On the upper storey, southeast facing windows frame spectacular views of St Vitus Cathedral and Prague Castle.

The two-year renovation programme was carried out by Czech specialist Václav Girsa. All of the original fixtures and fittings have been either found, renovated or replicated.

The villa (1928-30) was built for engineer Frantisek Müller and his wife Milada. Following Milada Müller's death in 1968 – her husband died in 1951 – the villa was requisitioned by the communists as repository for Prague Museum. From the early 1970s it became the Marxist-Leninist Institute of the Czechoslovak Communist Party, which occupied the building until 1991. The City of Prague acquired it soon after the Velvet Revolution.

For the first time, the villa will be open to the public, housing an Adolf Loos Memorial and a small library on the ground floor. **am**

Prague City of Culture link: http://www.praha-emk2000/cz/english/index.htm

Following a two year renovation programme, the Villa Muller is now open to the public



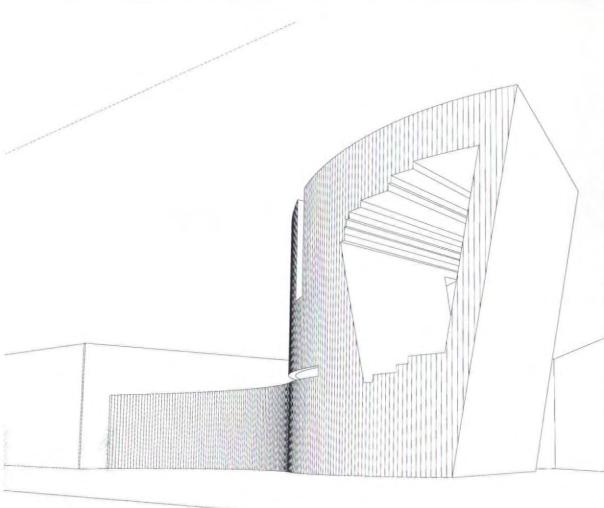
PAVFI ŠTECHA

GERMANY Veni, vidi, Vitra

German furniture manufacturer and patron of architecture Vitra opened its new Berlin Vitra Design Museum on 1 July. The museum occupies a disused transformer plant in the city's Prenzlauer district. Originally designed by Hans Heinrich Muller, the building was renovated by Hamburg-based interior and industrial designer Dieter Thiel.

The new layout transforms former machine and control rooms into exhibition spaces, with several other areas due for private lease. It mirrors the transformation of London's Tate Modern museum, another former industrial monument-turned capital city cultural institution.

Vitra has a track record of supporting contemporary architects. The original Vitra Design Museum, in Weil-am-Rhein, was designed by Frank Gehry. The firm has also worked with Zaha Hadid (Vitra Fire Station, Weil-am-Rhein) and Tadao Ando (Vitra Conference Centre, Weil-am-Rhein).



SPAIN Libeskind thinks small

Daniel Libeskind's smallest commission to date has broken ground in Puerto Andratx, on the Mediterranean island of Mallorca.

Studio Weil, a US\$720,000 exhibition space and workshop for American painter and sculptor Barbara Weil is Libeskind's first personal commission. The Berlin-based architect has designed everything from the furniture to the landscape scheme.

The monolithic, 12m-high concrete building is composed of two circular segments, with a

fragmented void, or 'open gallery', at its centre. Traditional Spanish mosaic tiles will contrast with Libeskind's radical forms.

The architect worked closely with the patron on the design and layout of the studio. The intention was to create a building that both corresponds to the landscape and forms a space to 'complement and contrast' the artist's work.

Libeskind describes the studio as 'an unprecedented fusion of the architectural and art: a fusion where the architecture in its form, materiality and geometry illuminates, complements and gives voice to the art of Barbara Weil'.

Completion is expected by the end of 2001. am

AUSTRALIA Sydney on track

Four architects have been shortlisted to design 10 railway stations on a new commuter line between the Sydney suburbs of Chatswood and Parramatta. The total value of the contract is US\$200 million.

Richard Rogers Partnership is teamed with local firm Michael Davies and Associates; Terry Farrell &

Partners with Conybeare Morrison and Partners, also of Sydney; RMJM's Hong Kong office is shortlisted with the Sydney office of Denton Corker Marshall, and Hassell, designer of the award winning Olympic railway station at Homebush Bay, makes up the list.

The competition organisers received over 60 tender applications, locally and from Europe, Asia and the US. The shortlisted teams are working on masterplans for individual stations. A decision is anticipated before the end of the year. **3**5

IN BRIEF

AUSTRALIA Shard luck

Melbourne's premier, Steve Bracks, has agreed to a working party to review the design of Federation Square, resurrecting hopes that the 21m-high entrance 'shard' could by reinstated (see WA86 page26). Bracks decreed that the shard be scrapped earlier this year, to protect the view of the historic St Paul's cathedral - which architects, Peter Davidson and Donald Bates argued would be framed by the shards. After public outcry, Bracks is believed to be reconsidering.

BELGIUM EU farce – part II

It took the European Union Court of Ministers five years to move into its purpose-built Brussels headquarters - the Justus Lipsius building (WA84 page 24). Now EU Secretariat announced that, due to the creation of new departments, the building is not large enough. Ministers have asked the Secretary General to contact the Belgian authorities to discuss terms for building/purchasing/ leasing of yet another building in the vicinity.

UK Gehry wins RIBA Gold

Frank Gehry has won the RIBA's Royal Gold Medal for 2000. The jury, chosen by RIBA President Marco Goldschmied, was composed of Peter Cook, Norman Foster, Piers Gough, Amanda Levete, Richard MacCormac and David Rock. They concludes: 'No one who believes in the power of architecture as a creative and artistic force can deny the contribution which has already been made by this master architect who, at 71, is still at the height of his creative powers'. Last year, the RIBA broke with 152 years of tradition to award the Medal to a city (Barcelona). (See also Experience Music Project page 42.)

GERMANY

Auto-city for the people

Last month, Volkswagen (VW), unveiled its Autostadt theme park. The company hopes that the development will go some way to changing its public perception.

Located next to VW's monolithic production plant in the north German city of Wolfsburg – probably the only city in the world founded for the purpose of vehicle production – Autostadt is a VW 'destination'. The 25ha, car-free site houses a museum, customer centre, Ritz Carlton Hotel and seven pavilions – one for each of Volkswagen's associated brands. All the buildings are grouped around an artificial, landscaped fjord.

The site was masterplanned by Henn Architekten of Munich. The pavilions were designed by architects from the associated brands' respective nations of origin – Czech firm Sipek Architects designed the Skoda Pavillon; the SEAT Pavilion is by Alfredo Arribas of Barcelona and Bentley was designed by KSS Architects from London. The exception is Italian producer Lamborghini, whose pavilion was designed by Henn.

Autostadt opened in June and is expected to attract 1.5 million visitors every year. VW hopes that the park will urbanise industry, improve the company's image, create 1,000 jobs and act as a tourist magnet for the city.

And Autostadt is not Wolfsburg's only new attraction. Earlier this year, Zaha Hadid won an international competition to design a US\$25 million Science Centre in the city (WA84 page 24). Completion is expected in 2004. Um

Web site: http://www.autostadt.de

IRELAND

Elements of Autostadt (from top): the Forum customer centre, the Audi pavilion and the Volkswagen museum



This extraordinary building for a new Irish government department has been designed to reinvent the nation's self-image.

Emerald Isle

London-based Geoffrey Reid Associates (GRA) won the contract to design the Department of Arts, Heritage, Gaeltacht and the Islands (AHGI) in international competition. Administered by the Office of

Public Works, the competition brief was explicit in its request for designs that present Ireland as 'modern and outward looking'.

In recent years, Ireland has become a world leader in the production of information technology hardware and skills, and a significant economic force within the European community. The government feels the time is right for 'Europe's Tiger' to undergo a national re-brand.

Located at the tip of Phoenix Park, the AHGI headquarters will act as a gateway both to Dublin and the park. 'We have

created an extension of the park's landscape, blurring the edges between the building and landscape,' says Mathew Bedward of GRA. The 15,000sqm development consists of offices and public facilities, including an exhibition hall, library, 250-seat auditorium, restaurant and sunken garden.

The complex is designed around a grass-covered artificial hill, that forms the roof of the auditorium, and a walkway that separates public facilities from private offices.

GRA is working with structural engineer Buro Happold. **am** The AHGI headquarters will act as a gateway to both Dublin and Phoenix Park











Court in the act

The European Union's most powerful court has been attacked for flouting the EU's own financial regulations when ordering the construction of three annexes to its Luxembourg headquarters, a project that overran initial cost estimates by 49%.

An official report says that the European Court of Justice (ECJ) ran up bills of US\$215 million for the three buildings. The Erasmus, Thomas More and Building C, which are all connected to the ECJ's main building, the Palais, on the Kirchberg Plateau in Luxembourg City, were designed by local architect Paczowski/Fritsch.

The initial ceiling had been US\$92 million. The report, by the EU's financial watchdog, the European Court of Auditors, said that the cost of the work, which was carried out by a developer appointed by the Luxembourg government on behalf of the ECJ, 'was directly affected by poor coordination'.

The report says that the ECJ had secured, 'little power to exercise control during the course of the work, especially as regards the extra costs arising from putting right defects caused by bad workmanship and from design and execution errors'.

The ECJ was also criticised for: 'Gradually occupying buildings for which it did not know the exact cost and where the financial conditions concerning its tenancy had neither been defined nor approved.' By doing so, the report says, the ECJ had 'imposed the obligations of a borrower' on itself. This puts it in contravention of the EU's Financial Regulation, which 'does not make any provision for having recourse to borrowing in order to make purchases of property'.

For the time being, the ECJ is renting the buildings from the Luxembourg government, which is supposed, by 2015, to transfer ownership of the annexes to the court. However, the court of justice will still have to buy the land on which they are built.

In response to the report, the ECJ blamed the 'budgetary and financial framework within which European institutions have to meet their accommodation requirements'.

CONTRACTS

ITALY Hadid walks on water

Zaha Hadid has won a competition to design a US\$4.95 million ferry and cruise ship terminal in Salerno. The 2,500sqm structure incorporates a looping passenger and vehicle ramp lined with shops and restaurants. Work will start next year, with completion in 2002. The commission is Hadid's second major win in Italy in the past 15 months. She won the competition to design the Centre for Contemporary Art in Rome early last year.

UK BDP's campus phase III

London's Building Design Partnership has won the competition to design the Centre for Arts, Design and Media at the University of Sunderland. The scheme is the third phase of the practice's St Peter's Campus, masterplanned in 1992.

UK Landmark achievement

KPF is the winner of an invited competition to design the tallest building in the northwest of England. The 'Liverpool Landmark' (its tentative title) is fundamental to a regeneration programme for Liverpool's waterfront and skyline. The 145m-tall, 60,000sqm Rumford Investments development comprises a cluster of slender stone towers framing a full-height glass and steel atrium.

US H&deM double act

Herzog & de Meuron has been selected as architect of the Walker Art Museum's US\$50 million expansion. The Minneapolis institution's 1971 facility, by Edward Larrabee Barnes, is windowless and faces inward on to a courtyard which functions as a sculpture garden. Herzog & Meuron's 2005 addition will be transparent, to invite visitors into the 'town square' created as the museum doubles in size.

Are you erien

'Many generations of complexity beyond Bilbao, is how its struc tural engineer describes Frank Gehry's Experience Music Project, The claim is no exaggera tion. From Seattle, Steve Daniels tracks the evolution of the architectural event of the year.

10 June 1996

EMP names Frank Gehry as architect Flushed with success over Guggenheim Bilbao (it won't open until October 1997, but the shell is complete and it is already being hailed as a career-making structure), Gehry hosts Microsoft co-founder Paul Allen at his spartan, modelstrewn office in Santa Monica, California. Allen had just hired Gehry to design the Experience Music Project, a multi-media shrine inspired by rock-and-roll legend Jimi Hendrix. 'Look around,' says Gehry. What interests you.' Allen settles on the most outrageous thing he can find - a stainless steel model of the horse's head sculpture at Berlin's DG Bank (wa84). 'Here,' he says. I want something like this, something "SWOOPY".

26 October 1996

Gehry unveils schematic design Gehry and his associates visit music stores, bringing guitars back to the office. They

disembowel and rearrange them, looking for a structural theme, create a model, then at Allen's insistence, make it even more outrageous. By now, Gehry is seeing new, extravagant possibilities for the stainless steel with which he had nearly clad Bilbao, in colours that Rimex Metals UK says it can produce, but which had never before been used on such a scale. 'Brush strokes in a painting merge; building materials do not,' says Gehry. He deliberately segregates the six individual modules that would become EMP, then attempts, despite their dissimilarities in colour and shape, to make them one. When we saw a picture of the model, we knew it had trouble written all over it,' says David Williams, general manager of Universal Structures (of Vancouver, Washington). 'Fabrication would be difficult, says Williams. 'Erection nearly impossible.' Universal, the largest bridge-steel fabricator on the west coast, intentionally bids the job high, and loses it to Columbia Wire and Steel, of Portland, Oregon.

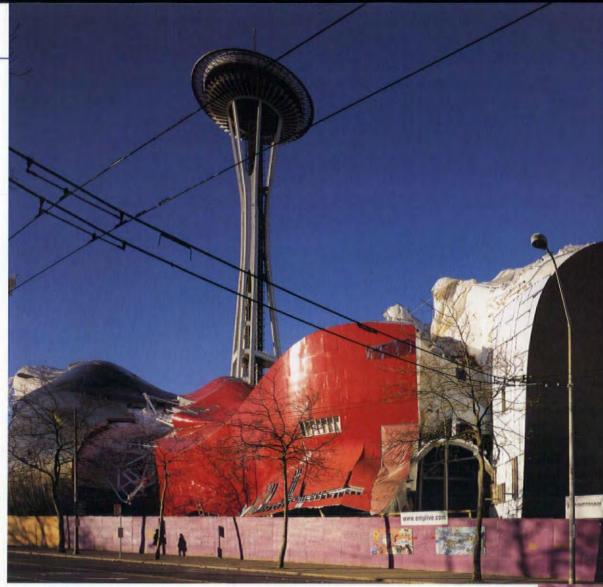
16 June 1997 With design still little more than a sketch, and with only the vaguest notion of how such a structure might be built, Experience Music Project's general contractor (Hoffman Construction of Portland, Oregon) begins excavation. It tackles the most difficult element first: the structure enclosing the city's 2.1km monorail. While it runs every 10 minutes over their heads, workers shore a 12m-deep excavation to cope with the extreme lateral loads exerted by the trains. When EMP is complete, monorail passengers will look into the heart of the film-set-like 'Artist's Journey'.

Dr. 80 dr

Summer 1997

It takes a model of 6,051 elements to define the Structural analysis 36m-high EMP structure, the same number of elements for a typical 70-storey office building, says Jon Magnusson, CEO of local structural





1 5th Avenue facade, with Space Needle in the background
2 skylight – stainless steel cladding detail
3 Monorail passage between 'Artist's Journey' and 'Sky Church'
4 5 Details of glass and steel sculpture on top of the Sculpture Wall

May to June 1998 Erection of steel ribs

Skilling Ward Magnusson Barkshire looked at a variety of ways to frame EMP: a monolithic shell was deemed too heavy, a steel space frame too expensive, concrete ribs not dimensionally stable over time. 'We eventually took a cue from airplane and boat builders,' says Magnusson. Resultant steel ribs, up to 1.4m deep and 60m long, like ribs of dinosaurs, are set in three parts. 'It is like nothing we have ever done before,' says Kenneth Carr, president of steel erector Carr Construction (of Portland, Oregon). The first ribcage takes six months to frame; the last two, six weeks.

31 August 1998

First modules encased in concrete shell

Framing is complete on 'Sky Church', the tallest EMP's element. EMP's magnitude and scale are apparent for the first time, says Allen project manager Paul Zumwalt. EMP's roof, or wall –

they are indistinguishable – is formed by attaching heavy welded wire stretched taut over the ribs. A fine-mesh stainless-steel hardware cloth covers the wire. Finally, 120mm of 38,000kPa shotcrete was covered by a waterproofing membrane, a layer of foam insulation and an acrylic coating.

11 January 1999 Skin installation

EMP's convoluted 1,670sqm stainless steel and aluminium skin is formed by nearly 4,000 separate aluminum fin-backed sections, each comprising up to 10 robotically cut metal panels, that attach to the pedestals extending from the steel ribs. With a CATIA station, Kansas City-based curtainwall supplier, A Zahner, works directly from the Gehry model to create the surface structure, a majority of which is assembled in the shop and transported to the site. The most wildly convoluted sections of the surface, like the gold 'Madonna Wall,' are assembled on site.

The fin-backed sections or frames attach to a 120mm-diameter aluminum tube system by means of extruded aluminum anchors, called 'rock-and-roll anchors', which permit the alignment of adjacent skin sections.

The skin installation is by far the thorniest of the problems facing EMP's building team. 'This is a lot more complex, both in the metal surfaces used and in the techniques we used to develop those surfaces, than any of the other Gehry projects,' says president William Zahner. 'There is no repeating pattern in the skin surface. If there are any two sheets alike, I haven't found them yet. It is incredibly hard to engineer that.' EMP, says Zahner, 'is by far the largest coloured stainless steel project in the world.'

6 January 2000 First exhibits installed

In addition to FOGA and local LMN Architects, EMP involved an unusual number of design specialists. Lounge areas are designed by Boora





Architects (of Portland, Oregon). Gehry's office hired interactive exhibit expert Maltbie Associates (of Mount Laurel, New Jersey) for custom electromechanical exhibit systems. Los Angeles-based Cunningham Group works with special effects team Lester Creative (of Valencia, California) on Artist's Journey, the motion-base attraction that takes visitors on a tour of the world of rock and roll.

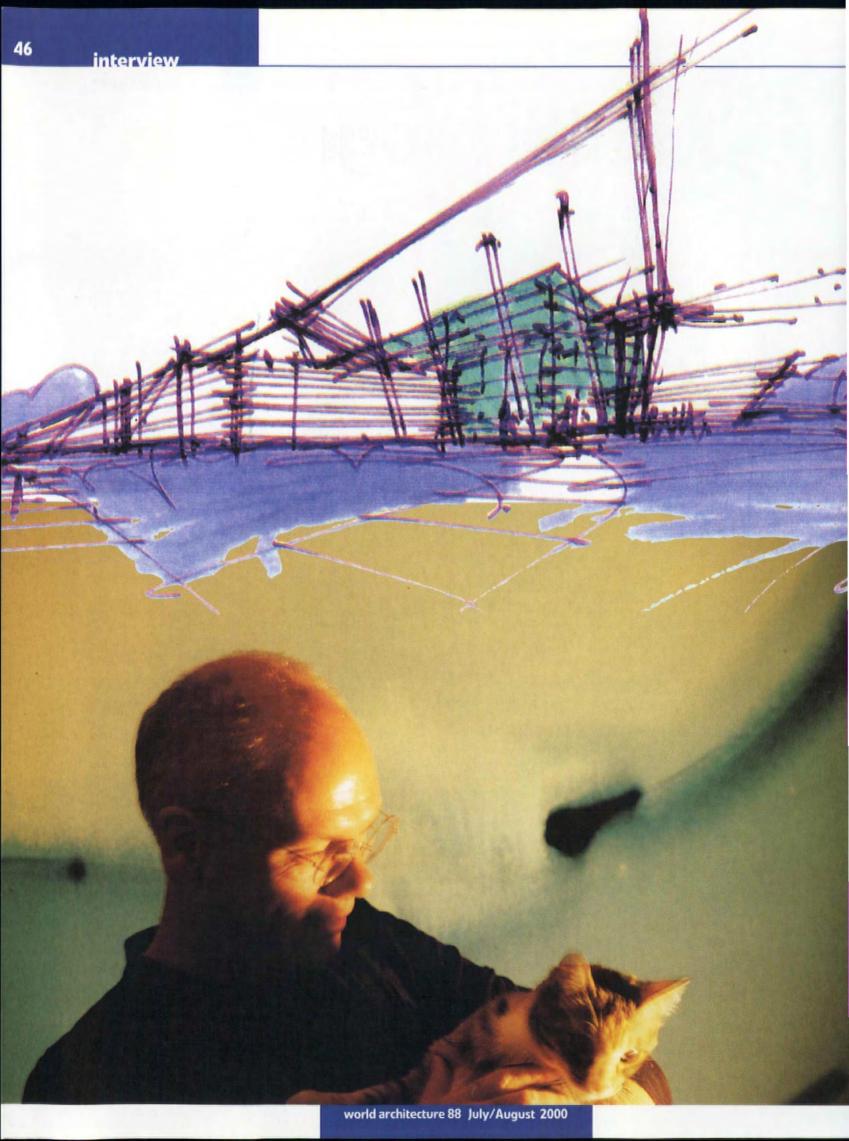
The result is a complex world of computergenerated interactivity. EMP is not so much a museum as a high-tech electronic playground where visitors play, participate, and buy, rather than contemplate. Visitors are given a device - essentially a strap-on Windows computer tethered to an infrared control device, connected to a pair of headphones which enables them to interact in various ways with hundreds of different exhibits. For example, approaching a kiosk containing a 1954 Stratocaster guitar, they can hear Eric Clapton play the instrument, either alone or as his music was eventually recorded, hear him talk about the 'blues', or hear Leo Fender talk about his various electric guitars.

23 June 2000

Grand opening

EMP's original construction documents 'proved to be little more than a sketch of intentions', says James Redding, project manager for Seattle electrical design firm Sparling. Eventually, however, 430mm x 280mm drawings of EMP's interior details became a book more than 300mm thick. 'This became the most heavily architecturally co-ordinated building I have ever seen,' he says.

EMP's 6mW power capacity is the equivalent of 800 homes. Its 1,000-tonne chiller could melt a 370sqm ice cube every hour. But it wasn't until about nine months ago that the full scope of the project became apparent. In the three months leading up to the grand opening, builders were involved in a race to complete EMP in time for a grand opening billed as, 'one of the most memorable events in American music history'. The Eurythmics, Bo Diddley, the Red Hot Chili Peppers, Alanis Morissette, Metallica and Dr Dre were among the 40 performers. wa



Media mogul

Ken Sowerby has carved out an unlikely global design niche. In the past six years alone, he has designed major projects in Rio de Janeiro, Des Moines, Jakarta, Sydney, Kaohsiung (Taiwan), Cairo, Sao Paulo, Mantova (Italy) and Chicago. What's his secret? Newspapers.

More specifically, 47-year old Sowerby's design approach, allied to evolving technologies in the printed media, has created unexpected architectural opportunities in a building type historically bracketed in the 'big shed' category – and thereby exposed to all the traditional preconceptions of aesthetic irrelevance.

Sowerby's curriculum vitae reads like an over-literal interpretation of life in the global village. Born in Liverpool, UK, Sowerby's family emigrated to Adelaide, Australia in 1953. He managed to stay put there long enough to train as an architect and work his apprenticeship with a series of Australian firms. But it wasn't long before he was on the move again.

Towards the end of the 1980s, Sowerby returned from a year-long tour of Europe with two clear goals. The first was to work for Sydney practice Woodhead Australia on the News headquarters for Rupert Murdoch's Media Group. The second was to leave Australia, and find some way of living and working in Italy – a country which had, 'got to his soul'.

Murdoch had already employed Munich-based process planning consultant Eurografica to develop a concept for his new headquarters. 'As a process planning consultant, they [Eurografica] had defined the bones of the project, but Murdoch wanted to re-work the design to reflect local input and tailor it to the News Corporation's needs,' adds Sowerby. He became project architect for Woodhead.

It wasn't the most dramatic design solution, but Sowerby was on the way. The experience gained and the contacts made have proved to be pivotal to Sowerby's career. His links with both Eurografica and the printed media persist to this day.

After News Corp, Sowerby moved to Hong Kong. 'It was also a stepping-stone to Europe,' adds Sowerby. He stayed on in the still-British territory for two years, working for Architects Pacific (AP).

The next pit stop, in 1992, was Frankfurt, Germany, where Sowerby acted as consultant architect for Eurografica. He helped set up Archigrafica – 'more or less a complementary architectural consultancy' to the process planning expertise – taking the role of managing director.

Since arriving in Italy in 1997, Sowerby has run his own practice, Architetto Ken Sowerby, from a small studio in the Umbrian hilltown of Spoleto. It is the scene of his greatest triumphs to date. His design for the Rio de Janeiro headquarters of Latin America's largest media group O Globo Empresa Jornalistica (sketch, top left), which opened last year, recently picked up second prize in the national Italian architecture awards. 'The jury was very poetic in its comment,' says Sowerby. 'They awarded the prize to the, "quality of design that breaks the stereotype of tradition [of the industrial shed]".'

In the age of globalisation, few architects have accumulated air miles like Ken Sowerby. Over the past 10 years he has undertaken major projects in 13 countries on six continents. Adam Mornement met world architecture's best-kept secret.

For Sowerby 'This type of building needs a fresh approach, to be reinvented and refined, to be in tune with the future. If you're going to build a shed, why not give it a dynamic form – look forward?'

Sitting Acropolis-like on the prow of a slight incline overlooking the sweeping bay of Rio, O Globo makes a significant impact. 'This is very much a Brazilian building,' says Sowerby. The purpose and component parts of the split-level, steel and glass shed are clear – O Globo houses the world's longest newspaper production hall. Like a medieval place of worship, O Globo's location and scale demands attention. 'In one sense, it is like a modern-day cathedral. They [religious communities] had a message to impart, and today, so does the media,' says Sowerby.

'Each of my clients has a high profile. They are the media. But they are also different from each other.' Industrial printing plants may represent a relatively small market, their bulk and form may be dictated by process and technological requirements – 'some of these machines are four storeys high' – but Sowerby is still a global architect. He has to accommodate local cultural references, develop effective relationships with local architects, and work long-distance.

Sowerby's most recent completed project is for the Des Moines Register, in Iowa. Designed with Eurografica as process planner and architect of record Shive-Hattery, the 3,000sqm concrete and steel box, is one of Sowerby's most complex commissions to date.

The problem was not so much technical, although the development of a self-sufficient internal cooling system that maintains a constant temperature in the area's extreme climate, wasn't easy. No, the real challenge was the client, and the American approach to shed architecture. Sowerby's firm belief in the aesthetic potential of industrial printing sheds is not only new to the building type, but new to clients. 'Many of my clients say, "we don't want to make a statement, we want a tin box". But with a little encouragement they see they can make a very positive contribution [to the built environment],' says Sowerby.

The Register, a curvaceous, low-rise box, clad with fibre cement panels, appears to have had an inclined Miesian glass box (the print hall) dropped on top of it. It came in on budget, and both the client and local population are delighted with it – evidence that a shed doesn't have to look like a shed. 'It's proof that it can be done,' says Sowerby.

These beliefs have been taken a step further on Sowerby's latest project, a production plant for The Age newspaper, Melbourne (wa87 page 24). Based on a series of sweeping, sculpted enclosures, The Age, says Sowerby, 'heralds the information age' in its recognition of 'the technological aesthetic generated from the process and function of producing the written media at the start of the third millennium'.

To invigorate a slightly plain façade, Sowerby has developed a 10-storey sculpture, in the form of a rolled-up newspaper which The Age has decided to use as its new logo – further evidence that clients get more than they bargain for when hiring Sowerby.

Looking to the future, is there a danger that other architects will jump on Sowerby's self-made bandwagon? 'There are a very few of my kind around,' says Sowerby, although he speaks favourably of the work of Chris Wilkinson and Nicholas Grimshaw. And now, with over a decade of experience, the work comes to him. New projects in North and South America are in the pipeline.

And you can forget suggestions that the age of the newspaper is nearing its end. 'That's not the case,' asserts Sowerby. Given his track record, you've got to believe him. wa



Healthy options

Architects are making hay while the sun shines on Western economies, but however much we want to believe otherwise, those economies remain cyclical. **Ray Kogan** thinks that when recession hits, preparation leads to salvation.

Architects are reveling in the booming

Western economy. But lurking beneath the calm surface is the dangerous misconception among many principals that their firms are doing well because of their leadership, when in fact it is the economy itself that has buoyed firms to a new level of prosperity. As management consultant to the A/E industry, we see many firms that are succeeding in spite of the manner in which they conduct their business. A turn in the economic tides will affect these firms most acutely.

There is no such thing as 'recession-proofing' a firm. But simply following certain business practices will make your firm more resilient and can make the difference between thriving through the next recession or becoming a casualty.

Ignorance may be bliss, but there's no excuse for it. To prosper through good times and bad, attune yourself to the forces that makes the construction industry tick. There are innumerable sources of information, many of them accessible via a few mouse clicks.

General business publications as well as the business sections of local newspapers often contain analyses and forecasts of local and national economic trends. Government agencies offer a wealth of information on their websites. In the US, check out the Census Bureau at www.census.gov and the Bureau of Economic Analysis at www.bea.doc.gov.

Professional associations such as the American Institute of Architects invest in excellent forecasting, at www.e-architect.com. Even more relevant are the forecasts generated by your clients' professional associations because trends in their markets directly affect your firm's future.

Specifically, here is what you can do today to make your firm stronger for tomorrow's recession:

Develop a strategic business plan. There is no more powerful tool for determining the future

of your firm. Simply put, it develops a future vision for your firm and anticipates what it will take to achieve it. It requires an unblinking analysis of the issues standing in the way of your firm's progress, a long-term vision for where you want your firm to be in five or 10 years, intermediate strategies and goals to guide you on your way, and specific action plans that describe discrete tasks and the person responsible for getting them done.

Make the most of marketing. Always the lifeblood of a firm, marketing takes on added significance preparing for a downturn. It's the best place to track the indicators that provide an early warning system for your firm's health. Imagine the value of reviewing monthly trendlines for:

- ■number of enquiries coming in from new clients
- ■total value of pending proposals firm-wide and by business group
- ■sales of new work
- **■**backlog
- percentage of repeat business from current or past clients
- percentage of repeat business from each project manager or principal
- "hit rates' from proposal to shortlist to win.

These graphs serve to warn of impending problems while there is still have time to address them.

Marketing that positions your firm as the leader in your select target markets makes clients feel more secure about hiring in a recession. Misguided firms that seek safety through diversifying lose their focused expertise and ultimately find themselves an inch deep and a mile wide, offering clients little in the way of security when the chips are down.

Cashflow is 'make or break'. Measure your average collection period and monitor the trendline. Conduct a credit check on any client that concerns you. 'Over-market' so you can be selective and

don't have to compromise your credit policies. Your accounting department should drive the invoicing and collections process – these people are much more comfortable in that arena than project managers. Share your firm's financial performance with all staff regularly to develop a 'cashflow culture' that increases awareness of its importance to the firm's health. Finally, cultivate your banking relationships now, not when you need a life preserver.

control staff expenses. Keep salaries reasonable and within industry standards. Higher compensation should come in the form of bonuses based on your firm's performance – that makes them easier to roll back later, especially if everyone understands where the money is coming from. Confront your performance problems now and cull the deadwood. Principals, as the highest paid staff, should be held especially accountable for their performance. No firm can afford a principal who is 'coasting', especially when money gets tight.

Moderation in all things. Don't make long-term commitments based on short-term success. Avoid taking on overly luxurious office facilities. Eschew excess support staff, especially at executive level. Tone down your desire for that top-of-the-line vehicle.

It's not all about cutting. Investments in marketing will position your firm in the minds of clients. Investments in technology will make your firm more efficient and competitive.

There's no panacea for avoiding a recession. But adhering to the mantra of 'lean and mean' now will allow you to exercise your architectural passion no matter what the economy does.

Ray Kogan, AIA is a vice president with Zweig White & Associates, a leading US management consulting and publishing firm focused on the design industry. He can answer questions at rkogan@zwa.com.

Arabian heights

With the opening of Sir Norman Foster's Al Faisaliah Centre, Riyadh has at last acquired a visible landmark. **Peter Fagan** reports from the Saudi capital.

Whereas most of Riyadh's major buildings tend

towards the conservative and understated, the Al Faisaliah Centre can be fairly described as 'trophy' architecture: uncompromising, even competitive, in its individuality.

The tapered 30-storey, 267m tower – won in a 1993 competition by the British team of Foster & Partners and Buro Happold Consulting Engineers – occupies a site in the Olaya district owned by the King Faisal Foundation. It has been integrated with the foundation's existing assets on the site, including the Kenzo Tange-designed Al Kharia Centre and the Al Khozama Hotel.

Work began on the US\$320 million project in 1997, with Saudi Binladin as main contractor and Turner International as project manager. During construction, all manner of records were broken: this is Saudi Arabia's tallest tower; its banqueting hall has the largest column-free span (57m) of any civil structure in the kingdom; it involved a record concrete foundation pour; it has the world's largest art glass mural; the list goes on. However, the Al Faisaliah Centre will not hold all of Riyadh's records for long. Ellerbe Becket's Kingdom Centre, with a 300m tower at its centre, opens next spring.

The reinforced concrete tower has the simplest of lines, but is topped with a flourish – a three-storey golden globe housing a restaurant with views right across the capital.

From a distance the glazed curtainwall is the chief feature of the facade, but closer inspection reveals aluminium sunshades at each level to reduce solar gain. Among the other energy-saving features is what is believed to be Saudi Arabia's largest thermal energy storage system. At night, in a dozen basement storage tanks, 600 tonnes of water is frozen using off-peak electricity for use by chillers the following day. This installation is estimated to have reduced peak electricity demand by more than 30%.

In addition to the 34,000sqm of office space in the tower itself, the development also includes a new five-star hotel, apartments, a shopping mall and a 5,000sqm themed entertainment centre.

This sprawling city is not without distinctive buildings, but until now the emphasis has been on low- and mid-rise developments of about six storeys: indeed, city regulations imposed a 15-storey limit on buildings before this project. Moreover, as elsewhere in this region, the exigencies of a searingly hot climate have frequently meant that design effort has concentrated more on internal atriums than on external facades.

Many of Riyadh's major buildings have drawn their inspiration from the Najdi vernacular. The Qasr Al Hokum (Justice Palace)



complex, Al Kindi Plaza and the attractive Riyadh Development Authority (ADA) HQ in the diplomatic area have walls with brown rendered finish simulating traditional adobe.

Inspiration in taken from one of few historic building to have survived the development booms of the 1970s and 1980s – the Marmak Fort in central Riyadh. Light is admitted by triangular openings in the metres-thick adobe walls. These small triangular windows have been copied as a keynote motif in the ADA HQ and are a striking feature in the exposed roof beams of Riyadh's Great Mosque by Rasem Badran of Jordan.

And in typical Najdi fashion, Al Kindi Plaza – winner of the Aga Khan Award for Islamic Architecture (by Beeah Group Consultants, a local firm) – has a stark monolithic exterior, but shaded internal courtyards with pools and fountains. Crenellations at rooftop parapets are another echo of past forms.

Against this background Al Faisaliah Centre stands in stark contrast, prompting Norman Foster to admit at a Riyadh conference last year that the opportunity to impose such a landmark on the cityscape was a major responsibility. By making the tower the centrepiece of a mixed development, the King Faisal Foundation is making every effort to ensure that the centre becomes a true focal point rather than a mere trophy landmark. **w**a

Peter Fagan is a former editor of Middle East Construction and Gulf Construction. The Al Faisaliah Centre
– Riyadh's first
example of record
breaking trophy
architecture

LECTURES AND CONFERENCES

MALAYSIA

Asia Pacific Structural Engineering & Construction Conference

Congress on 'The Construction Industry

- The Challenges Ahead', and held in
conjunction with building trade show
Malbex (see Trade Shows). Kuala
Lumpur, 13 to 15 September.

Contact: ASPEC 2000 Secretariat, Faculty of Civil Engineering, Universiti Teknologi Malaysia, 81310 UTM Skudai, Johor Bahru, Johor, Malaysia. Tel: +60 7 55 76 160

Fax: +60 7 55 66 157 e-mail: aspec2000@fka.utm.my Web: www.fka.utm.my/events/ ASPEC2000

THE NETHERLANDS

Sustainable Building 2000

A weekend of presentations, lectures and workshops. In Maastricht, 22 to 25 October.

Contact: The Organising Committee SB2000, Ronald Rovers, Novem, PO Box 17, 6130 AA Sittard, The Netherlands Fax: +31 46 452 82 60 e-mail: SB2000@novem.

e-mail: SB2000@novem.nl Web: www.novem.nl/sb2000

UK

Psychoanalysis and Space

Conference exploring the unconscious conditions of the spatial experience. London, 10 to 11 July.
Contact: AA School of Architecture, 36
Bedford Square, London WC1B 3ES, UK
Tel: +44 20 7887 4000
Fax: 44 20 7414 0782
Web: www.aaschool.ac.uk

US

2000 Desert Practice Conference

The annual get-together of the AIA California chapter, focusing on 'the business of practice'. Indian Wells, 17 to 19 November.

Contact: AIA California Council, 1303 J Street, Suite 200, Sacramento, CA 95814, US.

Tel: +1 916 448 9082 Fax: +1 916 442 5346 E-mail: mail@aiacc.org Web: www.aiacc.org

ARCHITECTURE AND DESIGN COMPETITIONS

GERMANY

Weka Architektur Preis 2000

Prize for designs or completed projects by architects in European countries, making innovative use of new technology and materials. Deadline 1 August, first prize US\$9,000.

Contact: sponsors Weka Baufachverlage, Berliner Alee 28 b-c, D-86153 Augsburg, Germany Tel: +49 821 50 41 476

Fax: +49 821 50 41 310 Web: www.wekaweb.de

ITALY

Grande Prix Casalgrande-Padana Italia

Awards for projects making fastidious use of porcelain. Submissions deadline 31 July, prize fund US\$54,000.

Contact: Grande Prix Secretariat, c/o Ceramica Casalgrande Padana, Strada Statale 467, n. 73, 42013 Casalgrande (RE), Italy

(RE), Italy
Tel: +39 05229901
Fax: +39 0522996121
e-mail: info@casalgrandepadana.re.it
Web: www.pianeta.it/casalgrande-

padana JAPAN

Membrane Design Competition

Calls for a membrane structure for urban public spaces. All submissions to be made digitally. Registration and submissions by 17 July, prize fund US\$23,000.

Contact: Membrane Design Competition Office, Taiyo Kogyo Corporation.

Fax: +81 6 6306 3154 e-mail: membrane@mb. taiyokogyo.co.jp Web: www.taiyokogyo.co.jp

UK

Colourcoat Building Awards

Awards recognising the best in completed steel-clad buildings in a range of categories. Any building in any country completed between August 1997 and July 2000 can be entered. Submission deadline 21 July, prize fund US\$40,000.

Contact: Colourcoat Building Awards Administrators, IRS Direct, March House, Murdock Road, Bicester, Oxon OX6 7PP, UK Tel: +44 1633 222211 Fax: +44 1633 222288 Web: www.cb-awards.com

US

Graphisoft Prize

Award for innovative use of CAD software in architecture. Registration by 20 October, submissions by 31 October, prize fund US\$10,000.

Contact: Graphisoft US, 235 Kansas

Street, Suite 200, San Francisco, CA 94103 US Tel: +1 415 703 9777 Fax: +1 415 703 9770

e-mail: gsprize@graphisoft.com Web : www.gsprize.com

EXHIBITIONS

AUSTRIA

Achleitner's Austria – The Archive of Twentieth Century Architecture

Extensive archive of regional Austrian architecture. Vienna, until 7 August.
Contact: Architektur Zentrum Wien,
Museumplatz 1, A-1070 Vienna
Tel: +43 1 522 31 15
Fax: +43 1 522 31 17
e-mail: office@azw.at
Web: www.azw.at

FRANCE

Lost and found

Exhibition of British design put together by London practice MUF. Bordeaux, until 3 September . Tel: +33 5 56 52 78 36

Fax: +33 5 56 48 45 20 e-mail: info@arcenreve.com

GERMANY

Festival of Vision – Hong Kong/Berlin

Cultural showcase of Chinese arts and architecture, symbolising collaboration between Germany and Hong Kong. Berlin, July 28-August 28. Contact: The Festival Office, John-Foster-Dulles-Allee 10, 10557 Berlin, Germany.

Tel: 00 49 30 397 870 Fax: 00 49 30 3948679

US

The White House in Miniature

Exploration of the refurbishment of the White House, through photographs, drawings, artefacts and a 18m-high model of the Executive Mansion.

Washington DC, until 17 September.

CANADA: EXHIBITION

MIROSLAV BENES



Josef Gocar's plans for regulation of Hradec Kralové between the Elbe and the Jungmannova, 1925

Shaping the Great City: Modern Architecture in Central Europe, 1890-1937

Follows the development of the cities of Habsburg Central Europe, where Modernism evolved in some of most historically sensitive urban contexts in the world. Canadian Centre for Architecture, Québec, until 15 October.

Tel: +1 514 939 7026 Web: www.cca.qc.ca

US: EXHIBITION



Model of Louise Kahn's Mikveh Israel synagogue, Philadelphia, 1961-72

Kahn's Modern Monuments

In his search for meaningful buildings symbolic of the human desire for assembly and communication, architect Louis Kahn (1901-74) forged a modern architecture that resonated with universal values. 'Kahn's Modern Monuments' presents 18 drawings and three models of some of Kahn's most important and monumental projects of the 1950s and 1960s. His sober exploration of the meaning, symbolism and form of civic, religious and cultural institutions is seen through the works in this exhibition, which include the National Assembly Building in Dhaka, Bangladesh, and the plans for the unbuilt Philadelphia Civic Center. They reveal the formal language Kahn developed to address the fundamental issues of communication, inspiration, and transcendence. In the creation of this new vocabulary, Kahn revitalised modern architecture by synthesising Modernism's functional and structural purity with forms and values abstracted from the past. 'Kahn's Modern Monuments' is part of 'Making Choices', the second cycle of MoMA2000 which focuses on the period 1920 to 1960. MoMA, New York, until August 22. Tel: +1 212 708 9750 Fax: +1 212 708 9691

Web: www.moma.org

Contact: National Building Museum, 401 F Street NW, Washington DC 20001, US Tel: +1 202 272 2448

Fax: +1 202 272 2564 Web: www.nbm.org

Tiborocity – Design and Undesign by Tibor Kalman 1979-1999

Recent work by graphic designer, urbanism commentator and all-round feather-ruffler Tibor Kalman. New York, until 20 August.

Contact: New Museum of Contemporary Art, 583 Broadway, New York, NY 10012, US

Tel: +1 212 219 1222 Fax: +1 212.431.5328

E-mail: newmu@newmuseum.org Web: www.newmuseum.org

UK

Buckminster Fuller: Your Private Sky

Presentation of a vast range of Fuller's ideas and creative output. At the Design Museum, London until 15 October 2000.

Contact: The Design Museum, Shad Thames, London SE1 2YD, UK Tel: +44 207 7403 6933 Fax: +44 207 7378 6540

TRADE SHOWS

BRAZIL

Construa 2000

Construction show to welcome European developers to the Mercosur market. São Paulo, 5 to 8 October. Contact: Exponor Brasil, Av Angelica

2466 – Coni 154, Edificio Angelica Trade Centre 01228-200 São Paulo, Brazil

Tel: +55 11 3151 6444 Fax: +55 11 315 16444 E-mail: xponor.com.br

Web: www.exponor.com.br

Glass South America

Expo for South American glazing and glazing systems. São Paulo, 16 to 18 November.

Contact: Miller Freeman do Brasil, Rua Wanderley 848, Sao Paulo FP, Brazil, CEP 0501-001.

Tel: +55 11 3873 0081 Web: www.mfi.com

GREECE

Infralympics Athens

Trade show and conference around the sports facilities and infrastructure

FRANCE: EXHIBITION



Mutations

Seeks to recreate living in the city via 'a hyper-dynamic installation of rapid-fire display that generates the vertigo of the contemporary city – its terrors and pleasures, its speed, its scale and exhilarating volatility'. Opens autumn at the arc en rêve centre d'architecture, Bordeaux, France.

Tel: +33 5 56 52 78 36 Fax: +33 5 56 48 45 20 e-mail: info@arcenreve.com Web: www.arcenreve.com

needed by an Olympic Games. Athens, 11 to 15 October.

Contact: EKEP, 12th km. National Road, Athens – Lamia, 144 52 Athens, Greece.

Tel: +30 1 2846 006

Fax: +30 1 2829 089

MALAYSIA

Malbex/Asian Stone 2000

Building, construction and Asian stone technology exposition. Kuala Lumpur, 12 to 15 September.

Contact: Reed Exhibitions Sdn Bhd, Suite 312 Block F, Phileo Damansara 1, Jalan 16/11 Off Jalan Damansara, 46350 Petaling Jaya, Selangor, Malaysia

Malaysia Tel: +60 3 4603766

Fax: +60 3 4603595 email: resb@reed.po.my Web: www.reedexpo.com

SINGAPORE

Kitchen + Bath Plus 2000

The latest trends in equipment and accessories for kitchens and bathrooms. Singapore, 24 to 26 October 2000.

Contact: Singapore International
Convention and Exhibition Centre, 1

Raffles Boulevard, Suntec City, Singapore 039593.

Tel: +613 431 2293

Fax: +613 431 2268

Web: www. sicec.com

UK

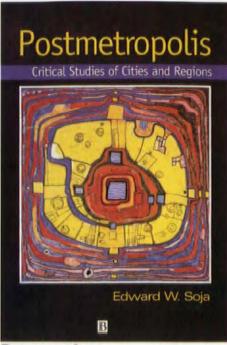
Construct IT

Three-part exhibition and conference, comprising Construct IT (software), FM Expo (facilities management and services) and Securex (security systems). London, 19 to 21 September. Contact: Miller Freeman, 630 Chiswick High Road, London W4 5BG, UK Tel: +44 20 8987 7703
Fax: +44 20 8995 2788
Web: www.millerfreeman.com

US

National Building Products Exposition

The fastest-growing US building trade event. With the National Hardware Show. Chicago, 13 to 16 August. Contact: Reed Exhibitions, 383 Main Avenue, Norwalk, CT 06851, US Tel: +1 203 840 5662 Fax: +1 203 840 9662 E-mail: us-shows@ reedexpo.com Web: www.reedexpo.com



Post codes

Postmetropolis: Critical Studies of Cities and Regions. By Edward W Soja. Blackwell Publishers, Oxford, UK. 464pp, illustrated b&w throughout. £60 US\$62.95 (hardcover) £16.99 US\$26.95 (paperback)

By Tom Leslie

Traditional sociological and urban design critiques of the American city have left vacant a wide middle ground of critical enquiry. Between statistical analysis and physical critique, Edward Soja attempts to bridge the divide by proposing a 'third way' for urban studies. Based on Henri Lefebvre's ideas of socially and culturally charged 'spatiality', Soja's examines the resulting 'cityspace' and its related 'synekism' – the synergistic effects of urban agglomeration that create city culture, society, and production.

Postmetropolis is a sprawling work; Soja is eager to see such forces at work in a huge variety of examples, but less willing to examine these phenomena in depth. The result is a broad overview, ranging between sociological and cultural points of view, with the provocative possibility of pairing the two in a new urban paradigm.

Soja divides the book into three parts. Of these, the most valuable to the lay reader will be the central six essays, plus a comprehensive literature search on 'urban discourses'. In these, Soja accounts for economic, cultural, social, and formal restructurings of metropolitan areas, focusing on what he terms the LA School of Critical Urban and Regional Studies. Crucial to these are the growth in the flow of global capital, a sudden shift in the relative importance of industrial production versus financial and service industries, the growth in infrastructural technology (physical and electronic), the rise in worldwide immigration, and the rise of the region as a political power.

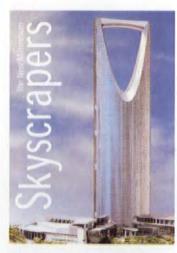
The results of these forces Soja refers to as 'Fractal', 'Carceral' and 'Sim' cities. Fractal City refers to the shattering of cultural and socio-economic homogeneity, creating professional and economic niches based on race and class. The Carceral City refers to the 'urban cold war' in Los Angeles between forces of government and those of marginalised classes – a theme taken from Mike Davis' excellent City of Quartz, which Soja quotes at length. Finally, Sim City acknowledges the power of simulated urbanism in contemporary culture with the obvious parallels between Hollywood's projected urban sensibilities and the popularity of the Sim City computer game. This comes closest to realising Soja's qoal of reconfiguring a critical urban discourse.

Postmetropolis prefaces these essays with a history of the city from a new perspective. In Soja's conjecture, the rise of agriculture and trade stemmed from the growth of early cities and their attendant ability to synergistically support regional economies, pointing to settlements such as Catal Huyuk in Turkey as evidence that it is urban spatiality that creates urban culture and society.

Unfortunately, this theory is not rigorously researched or evidenced. Indeed, throughout the book the reader is often frustrated by the use of tertiary sources, and the use of anecdotal evidence or pure speculation. Ultimately this weakens the book's legitimate arguments and concerns.

The collection of texts from the 1992 Los Angeles riots at the end of the book present a startling change in focus. The riots were a convulsive event for urbanism in the US, and the trial transcripts, urban poetry, and news reports remain visceral reminders of the power of urban geography to affect the lived space of the city.

Tom Leslie is an LA-based architect and writer



Fight for height

Skyscrapers: The New Millennium. By John Zukowsky and Martha Thorne. Prestel, Munich. 144pp. 130 colour and 120 b&w illustrations. US\$49.95, £29.95, DM78 (hardcover)

By Jeff Herzer

In 1980, the 20 tallest buildings in the

world were in North America, as were 81 of the top 100. By 2000, eight of the top 20 and 58 of the top 100 were in Asia. The economic and political upheavals of these years have been mirrored on the skylines of the world. It was perhaps the first period in architecture to be remembered as much for what wasn't built as what was. Where does skyscraper design stand as we begin the 2000s?

Skyscrapers: The New Millennium frames these questions in the economics and politics of the past two decades. John Zukowsky's opening piece, 'Skyscrapers Before The New Millennium: A Question of Boom or Bust' recounts the exuberance and the dashed plans, first in America and then in Asia. Pelli's unbuilt Miglin-Beitler Tower and new projects in Frankfurt and Shanghai are recalled, as are cutting-edge technologies that were proposed or advanced in the

1990s: the 'green' skyscraper, Otis Elevator's Odyssey vertical/horizontal elevator system, Japan's 'supertall' concept designs, Shimizu's robotic building construction system.

Next comes a colourful display of more than 50 skyscraper projects of the era, covering the spectrum of styles, cultures and locales.

The headline creations you would expect to see are included – Petronas and Jin Mao – but the portfolio includes an appealing mix from Europe, Australia, Asia, the Middle East and the Americas: Arquitectonica's Westin-New York E-walk, Torre Mayor in Mexico City, Foster's Swiss Re headquarters in London, the Romantic Tower in Frankfurt, the Emirates Towers in Dubai. Most of the featured projects have completion dates in the late 1990s or early 2000s.

Martha Thorne's essay 'The Elusive Dream' is a fine summation of the race to build the world's tallest building. The book ends with short biographies of 43 of the architects and firms involved in skyscraper designs.

In recent years, some have said the new millennium would see the end of skyscrapers, as information technology decentralises our social structure. The authors see the similarity of skyscrapers in East and West as proof that the world is growing even smaller and more interrelated, and believe the desire to go higher won't go away.

They hope the styles and technologies of the past 20 years will lead to better buildings, gauged by quality of architecture and quality of life. That would be a happy ending.

Jeff Herzer is a freelance writer and the editor of www.worldstallest.com

Curious behaviour

Breathing Cities – The Architecture of Movement. Edited by Nick Barley. Birkhaüser Verlag AG, Basel, Switzerland. 128pp. 70 colour and 60 b&w illustrations. SFr48, DM58 (paperback)

By Adam Mornement

A friend of mine holds the view that the ultimate sin of metropolitan life is to appear shocked by curious human behaviour. According to this rationale, *Breathing Cities* barely merits a bat of an eyelid.

Though manifestly a book (it certainly retails at a book-type price), *Breathing Cities* behaves like a magazine. More than 25 writers, architects and photographers contributed; the five main essays (articles?) are fresh and newspaper-bouncy, and a high proportion of the features are picture-led. The good news is that it works.

Over the years, the human fascination with cities – which is biggest? are the streets paved with gold? – has proved to be as adaptable and robust as cities themselves. *Breathing Cities*, ostensibly a study of the processes of perpetual motion that shape contemporary cities, is a refreshing variation on a familiar theme.

The book contains few revelations. We know that cities make immense demands on their environment. That information is the 21st century equivalent of gold bullion, and will guarantee the relevance of cities for a good few years

to come, feels equally familiar. And the architectural case studies – Koolhaas' Euralille; Shigeru Ban's cardboard houses, Kas Oosterhuis' Saltwater Pavilion – are particularly disappointing. But where *Breathing Cities* succeeds is in its treatment of the obscure – the curious.

To the people who live in them, cities evolve imperceptibly. For all the talk of e-revolutions and 24-hour societies, on a day-to-day basis city dwellers make sense of 'their' districts by glorifying mundane local landmarks or ugly street corners, because they are familiar.

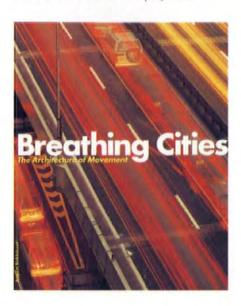
In the same way, a picture-story about an anonymous man, photographed in secret over a period of two years, or forensic analysis of fingernail dirt in five European cities (a high proportion of concrete dust in Brussels, apparently), puts the reader in position of voyeur – exactly the role that the overwhelming scale and anonymity of city life forces upon us all. It is the minutiae that give cities a semblance of human perspective, and *Breathing Cities* does this expertly.

Like all successful publications, *Breathing Cities* gives the impression that it was put together by a team dedicated to its topic. From Nick Barley's introduction – 'Philosophers forecast the demise of cities ... in fact the reverse has happened' – there is an unrelenting sense of enthusiasm for the potential of metropolitan centres.

And of course, every good book needs shockvalue facts and figures. Did you know that the average journey, from farm to plate, of the food we eat is 1,000 miles? Or that the population of Dhaka, Bangladesh rises by 1,300 every day? Or that 50,000 trucks carrying 25,000 tonnes of food roll in to Mexico City every day? No, neither did I.

Breathing Cities may not be ground breaking, but it is accessible. Cities cover only 2% of the world's surface, but a huge majority of the world's population live in one. These places have universal appeal, and low-cost, fast-turnaround books of this nature fill a valuable gap in the market. Curious no one thought of it before.

Adam Mornement is wa's deputy editor

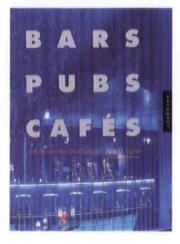


A call to the bar

Bars, Pubs and Cafes – Designs for Social Style. By Julie Taylor. Rockport Publishers, Massachusetts. 192pp. 200 colour illustrations. US\$50 £35 (hardcover)

By Bay Brown

The restaurant or bar is for interior designers what the summer house is



to the architect. It is the place to push the envelope, experiment and think out of the box. And in the current US economy, new bars and restaurants are cropping up at fast as dotcoms.

Restaurant and bar designers are sometimes stoically minimalist, deferring to a clientele that are there to enjoy good food, another's company, or perhaps to check each other out.

But increasingly venues are themed, using self-consciously lavish materials and textures to create stage designs for the real world. They are writ large, almost as if to grab the attention of a child who is attracted to big shapes and dramatic colour.

Author Julie Taylor highlights some of the more provocative establishments she has visited in her travels and in the process presents a collection of cool spaces that are fun to thumb through.

The book includes the underwater Red Sea Star in Eilat, Israel, where bar patrons can drink with the fish, as well as the London bar Can, one of the forerunners of the anti-pub trend, where homey upholstery is replaced by sleek glass and metal.

Aside from the re-emergent metropolitan trend towards eating/drinking as a dramatic happening, Taylor's book tells us that back-lit bars and monochromy are in. At San Francisco's silvery Mercury restaurant, designed by the archly-fashionable Fun Display, bubbled mirrors, salt-andpepper marble and gracious wrap-around chairs clad in silver vinyl create a glam effect, marred only by the silver-glitter deer head reigning over the lounge, a kitschy faux-pas in otherwise elegant setting.

Michael Chow, international restaurateur, interior designer and author of the book's foreword, follows this penchant for monochromy with his new Eurochow in Los Angeles.

Chow's multi-level open-plan restaurant bursts with an eery white glow – suggesting on one hand good, clean California living, tempered by a bluish glow, evoking the dysfunction of Woody Allen's film *Celebrity*.

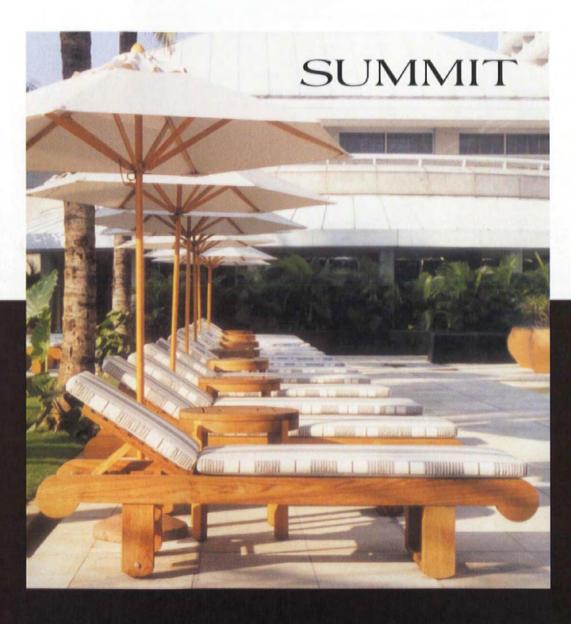
Chow asserts that for him 'lighting is the focus, and everything else must serve the focus. Anything else is secondary'. This is the gospel, as any eater and drinker who has trundled block after block in search of perfect lighting can attest.

Light is the ultimate medium for creating drama and effect, but it also has an exclusive way of effecting intimacy and comfort.

Bay Brown is wa's New York news correspondent

Summit's timeless designs in plantation teak by the ASID award-winning designer Kipp Stewart

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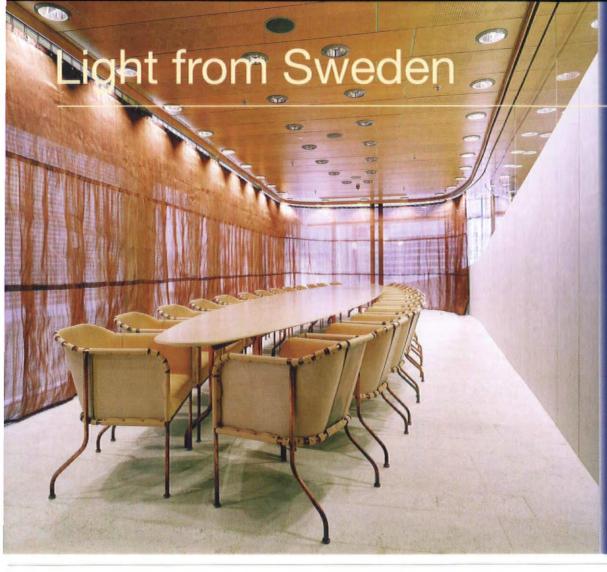




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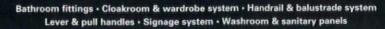
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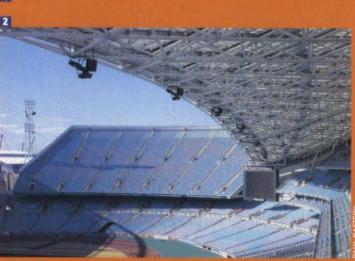
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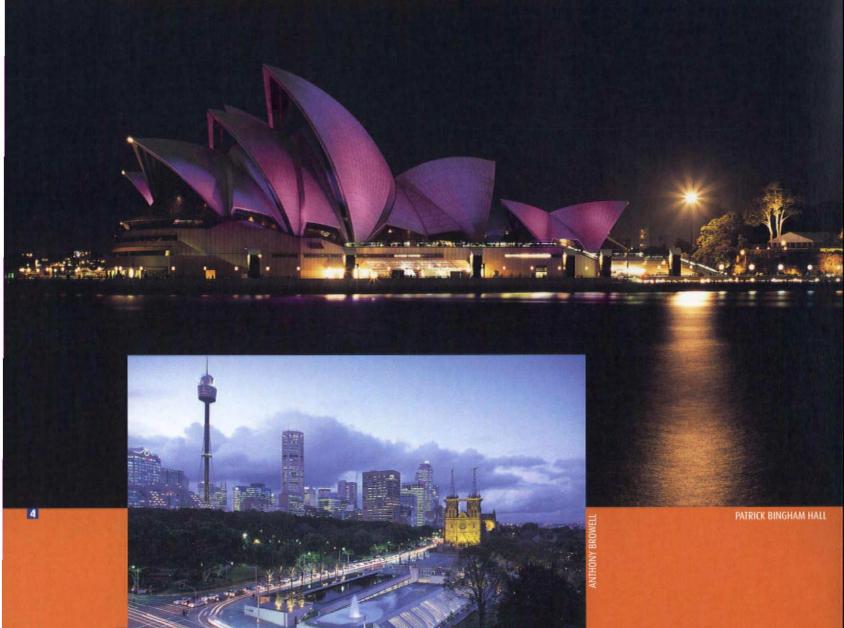
- 1363 George Street, by Denton Corker Marshall
- 2 Stadium Australia, by HOK/Bligh Voller Nield
- Renzo Piano concept sketch of Aurora Place
- 4 Sydney Opera House, by Jørn Utzon, under lights
- 5 Cook and Philip Centre, by Bligh Voller Nield

For the first time the Sydney Opera House has some competition infectious confidence in the Olympic host city has generated a new wave of architectural icons. The games will come and go, but their built legacy will change the face of Sydney for ever.



66 A skyscraper on stilts – Denton Corker Marshall's new city centre office tower

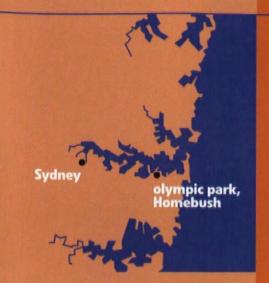
72 Why is the
Archbishop of Sydney
worried about the effect
Bligh Voller Nield's Cook
and Philip Centre might
have on his congregation?

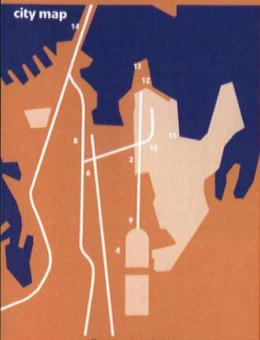


76 Renzo Piano's first project in Australia is taking shape, and it's raising the standard of Sydney's commercial developments to new heights

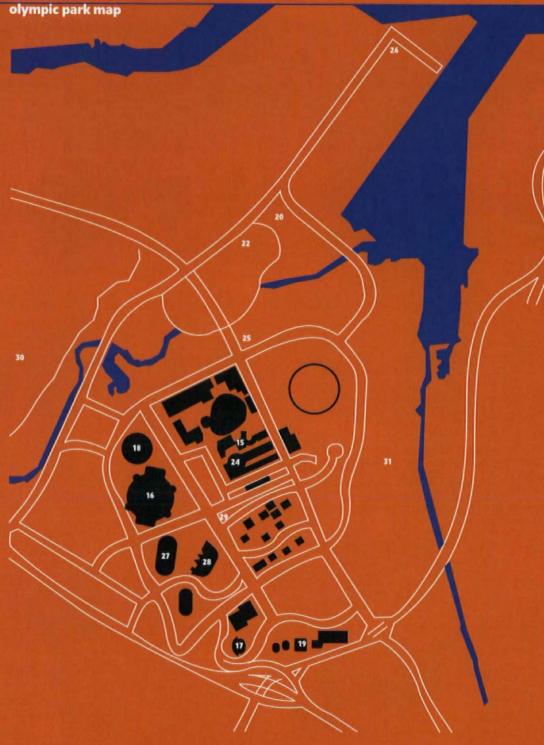
world architecture 88 July/August 2000

sydney





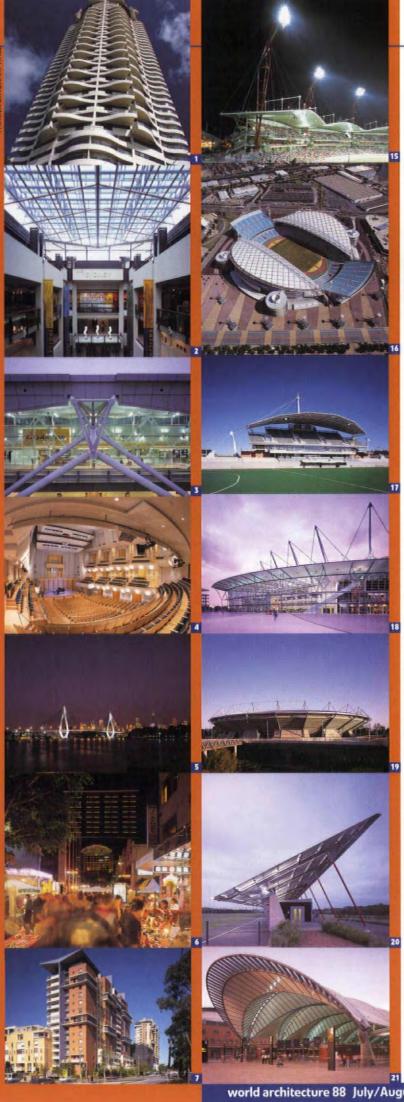
- Key to maps and pictures
- 1 Apartment block (Harry Seidler) off map
- 2 Customs House (Tonkin Zulaikha & Jackson Teece Chesterman Willis)
- 3 Quantas domestic terminal (Hassell) off map
- City Recital Hall (Peddle Thorp and Walker)
- 5 Anzac Bridge (Roads and Traffic Authority, NSW) – off map
- 6 Chinatown (Lighting: Barry Webb)
- 7 Moore Park Gardens housing (Allen Jack
- + Cottler) off map
- 8 383 George Street (Denton Corker Marshall)
- 9 Cook & Phillip Park (Bligh Voller Nield)
- 10 Aurora Place (Renzo Piano Building Workshop)
- 11 Wooloomooloo Wharf (Buchan Group see page 72)
- 17 East Circular Quay (Peddle Thorp and Walker see page 73)
- Sydney Opera House (Jorn Utzon)
- 14 Sydney Harbour Bridge (JJC Bradfield)



- 15 Sydney Showgrounds (Cox Richardson, Peddle Thorp)
- 16 Stadium Australia (HOK/Bligh Voller Nield)
- 17 State Hockey Centre (Ancher Mortlock & Wooley)
- 18 Sydney Superdome (Cox Richardson/Devine Deflon Yaeger)
- 19 NSW Tennis Centre (Bligh Voller Nield)
- 20 Archery 2000 (Stutchbury & Pape)
- 21 Olympic Park Rail Station (Hassell)
- 27 Millennium Parklands (Hassell/Bruce MacKenzie Design/Pete Walker & Partners)
- 23 Lighting Pylons (Tonkin Zulaikha Architects)

- 24 Sydney Showgrounds Exhibition Halls
 (Ancher Mortlock & Wooley)
- 25 Sydney Showgrounds Animal pavilions (Scott Carver, SJPH & Timothy Court)
- 26 Ferry Wharf (Alexander Tzannes Associates)
- 27 International Athletics Centre (Cox Richardson/Peddle Thorp)
- 28 International Aquatic Centre (Scott Carver)
- 29 Homebush Bay Novotel Ibis Hotel (Travis McEwen Group)
- 30 Olympic village (various)
- 31 Bicentennial Park (Contextn Landscape)

Images 15 - 21 refer to city map, Images 15 - 21 refer to Olympic Park map



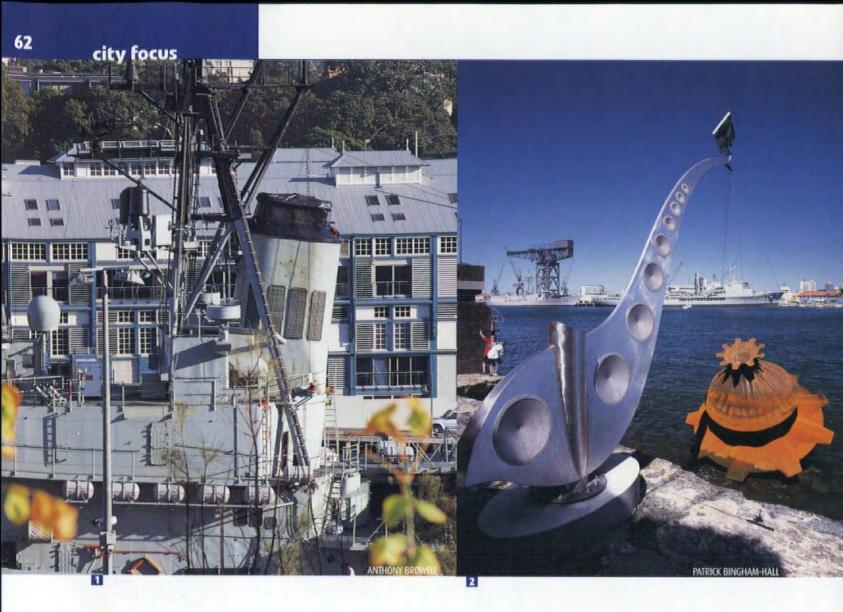
Game

Sydney, host city for the 2000 Olympics, has been gearing up for its big moment with the largest building programme in Australia's history. Philip Goad reports from a city that intends to be famous for longer than 15 minutes.

A mad flurry of building activity and heightened selfawareness have characterised Sydney in the last decade. The finishing touches are being put on Australia's most populous city before its world premiere at the 2000 Olympics. Sydney wants to appear at its best. Perceptions of the place vary dramatically, especially from those who don't live there. To some, Australia's largest city is 'Sinny' or 'Sin city', with a magnificent harbour and secret bush suburbs encircling secluded coves. To others, it is the one Australian city that has a dominant international presence. It is after all, the country's financial centre, its major tourist destination, and home to its national media as well as the infamous Sydney Gay and Lesbian Mardi Gras. For the envious, Sydney simply spells hedonism, croissants on the sundeck, and surf not just on Sundays but every day.

However since 1992, when the Olympic bid was won, Sydney's dazzling setting, its Harbour Bridge (1932) and its iconic modern masterpiece, Jørn Utzon's Sydney Opera House (1973) were not targeted as sole star performers in the city's sashay on to the world stage. Sydney's urban trophies and its ambience of a life of louche were quietly set aside. For the first time in nearly a century, Sydney was going to be made to operate as a modern metropolis and repair its image as Australia's brassy city of pleasure. Sydney has indeed remade itself, and in record time, but not without its critics, its archpublicists, and of course, those who are simply jealous of this necklace of Arcadian urbanism on the edge of the Pacific.

For the XXIV Olympiad, an entirely new satellite sports city has been created at Homebush Bay 20km west of central Sydney. To accommodate the Games in the centre would have been almost physically impossible. Infrastructural turmoil would have been caused by the city's greatest physical asset, its harbour. At Homebush, target for an Olympic bid since the 1970s, the aim was to create a second pole to Sydney's harbour and downtown magnetic focus, in Sydney's true geographic and demographic



centre. It was an upgrade that had political overtones in resurrecting the forgotten western suburbs through the remediation of a degraded industrial landscape; provision of publicly accessible recreational facilities (a new rail link was put in); and a new venue for the Royal Agricultural Society's Showgrounds. All buildings and infrastructure were dictated by ecological sustainability. Sydney could therefore afford international eyes being turned from its well-known public face. With almost all the Olympic facilities in one place, Homebush Bay proved ideal on all counts.

The result has been an urbanism of vast crowd-control

derived scale and an architecture of repetitive section. At its best, this architecture suggests an empathy with the landscape and an allegorical reading of the sport, like Stutchbury and Pape's Sydney International Archery Park (1999). At its most banal, some of the stadia exhibit the formularisation of type, expedient construction and detail for efficient corporate packaging, the result of buildings starting with responsible financial management plans rather than altruistic hopes for city form. With few exceptions, the design

altruistic hopes for city form. With few exceptions, the design competition process (and significantly, a role for Australia's best known architects Harry Seidler and Glenn Murcutt) has been notably absent. While publicity for the Games suggests sparkling consistency, many in Sydney grumble about missed opportunities. Where is the touch of Tange or Nervi, the panache of Barcelona,

they say? Any perceived mediocrity is due largely to the tendering process and the design-construct package. But all this is beside the point. Sydney is ready for the Games in September, there is still money in the bank, and the spidery silhouette of white steel trusses rising above the mangroves has its own ethereal beauty.

As a corollary to the distant creation of Homebush Bay,

central Sydney has undergone an urban renaissance. Infrastructure, institutional buildings, squares and streets, and public art have all received attention in the rush to September 2000. The list of projects is endless. Chief sponsors of this massive upgrade have been the New South Wales State Government and the City of Sydney. The sandstone Customs House (1844-1915) has a new life as a museum, exhibition space, and gallery. There is Cook and Phillip Park (pages 72-75), a huge new urban plaza in front of St Mary's Cathedral (1866) which is finally getting its spires. A new colonnade has been attached to East Circular Quay, the controversial development which outraged Sydney's cognoscenti with its plump proximity to the Opera House. And the ferry wharves at Circular Quay have been spruced up by Lindsay and Kerry Clare for the Department of Public Works and Services. Most of the changes have met with resounding approval. Other matters, such as the introduction of Victorian bluestone, are regarded as alien intrusions by the champions of Sydney as a sandstone city. The private sector 1 Woolloomooloo Wharf is the largest of Sydney's finger wharfs. Buchan Group's sensitive renovation uses new material and plenty of invention 2 Dual Nature by Nigel Helyer - public art as part of the beautification of Sydney 3 'The Toaster' -Peddle Thorp and Walker's controversial East Circular Quay development

City factfile, provided by Hanscomb

General Sydney is capital of the state of New South Wales, and Australia's largest city. Located on the eastern coast, the city is one of the South Pacific's most important ports. The metropolitan area is about 1,735sqkm, but the vast conurbation extends to a total 12,400sqkm. Sydney is the country's major industrial, commercial, financial, and tourist centre. Sixty of Australia's largest corporations have their headquarters there.

Climate With a temperate climate Sydney enjoys warm, humid summers and mild winters. The average temperatures (minimum/maximum) are 18°/26°C in January and 8°/16°C in July. Average annual rainfall is 1,200mm, greatest from February to June.

Population More than 3.8 million in the metropolitan area.

Language English

Average exchange rates Australian dollars per US\$

1995 1.34 1996 1.26 1997 1.53 1998 1.63 1999 1.53 2000 (May) 1.74

Time difference Sydney is 10 hours ahead of Greenwich Mean Time and 15 hours ahead of Eastern Standard time.

Currency Australian dollar, subdivided into 100 cents.

Airport information Kingsford Smith Airport is 11km south of Sydney.

Telephone The country code for the Australia is 61. Sydney's city code is 2.

Business hours 8:30am-5:30pm, Monday-Friday.

Archi-tourism

If you're touching down in Sydney this year, the Royal Australian Institute of Architects (www.raia.com.au) suggests an early visit to its NSW headquarters at 3 Manning Street, Potts Point. The staff can advise on sites to visit and itineraries for self-guided walking, bus or ferry tours.

Walks

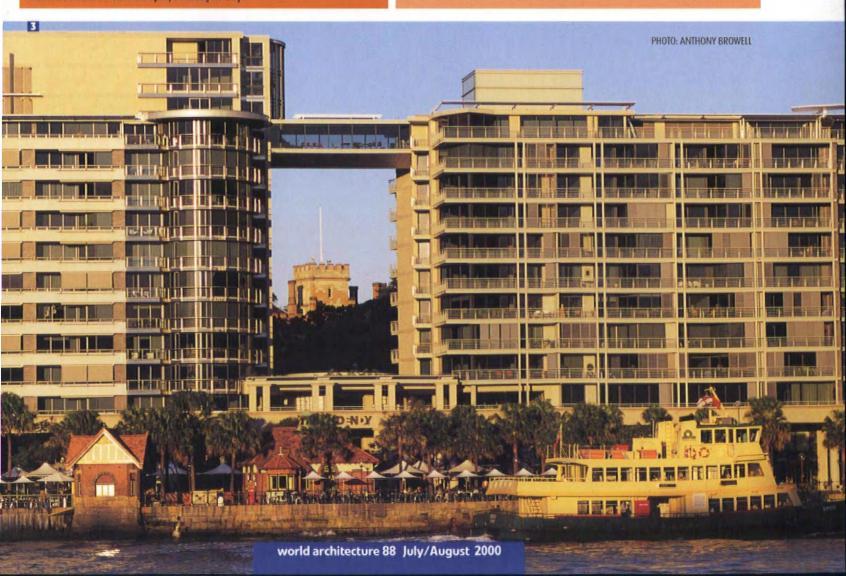
In the city centre, walk from Hyde Park, stopping first to admire the new Cook and Philip Park by architects Bligh Voller Nield (see pages 72-75) in front of St Mary's cathedral. On Macquarie Street you will pass one of Australia's oldest buildings – the Hyde Park Barracks, as well as Parliament House and the State Library (all open to the public). The newest Renzo Piano project, Aurora Place (see pages 76-77), is further on, opposite the Botanic Gardens. At the end of Macquarie Street is the Opera House, and there is plenty of coffee served by the waterside under Peddle, Torp and Walker's much maligned 'Toaster', or East Circular Quay.

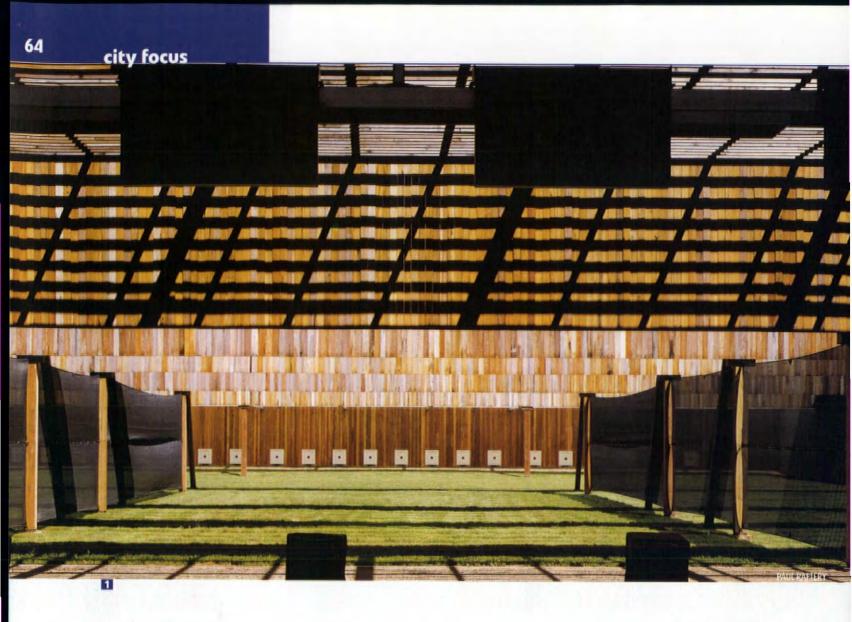
To tour the newly gentrified Surrey Hills area, take a train or bus to Central Station, walk along Foveaux Street and down Crown Street. Carry on to bustling Oxford Street, where it is estimated there are more architects living and working than anywhere else in Australia.

Also recommended is a ferry ride to Manly from Circular Quay, or a bus ride to Palm Beach, where you'll find inspirational beach houses designed by the likes of Harry Seidler, Sydney Ancher, Peter Muller and Douglas Snelling

Restaurant details from www.citysearch.com.au Hotel details from www.travelweb.com

With thanks to Stella de Vulder of the Royal Australian Institute of Architects





has capitalised on the Olympic boom with a rash of high density apartment buildings and the addition of office buildings such as Renzo Piano's Aurora Place (pages 76-77) and Denton Corker Marshall's 363 George Street Tower (pages 66-71). The old General Post Office (1864-91) has become a smart hotel and shopping complex. But one of the most dramatic changes has been the attempt to solve Sydney's parlous transport system. For the airport alone, a new 10km underground railway now links the inner city with the recently upgraded International and Domestic Terminals at Sydney Airport. And linking to the Harbour Bridge and Tunnel is the US\$400 million Eastern Distributor toll road.

A key figure in Sydney's re-imaging has been New South Wales Government architect, Chris Johnson. Instrumental in opening up commissioning of public works to a diverse range of architectural practices, he has also in the past 12 months, most notably with photographer Patrick Bingham-Hall, published three books on Sydney: Shaping Sydney (Hale and Iremonger, 1999), James Barnet (Pesaro Press, 2000) and Celebrating Sydney 2000 (Pesaro Press, 2000). Each book has stressed notions of civic decorum, a term more generally reserved in Australia for cities other than Sydney. Melbourne and Adelaide have been regarded as gracious and urbane but politely dull. Johnson has had a different ambition for his city, one that challenged the Internationalism of Harry Seidler's brilliantly sculptural skyscrapers that wish a different urbanism

underfoot and also the notion that Sydney was defined only by Bondi's surf beach, pubs with tiled walls ready to be hosed down after the evening swill, and the undeniably seductive undulating shoreline.

Sydney has other reasons for its renaissance. At the dawn of the millennium, it was host to the world's largest fireworks display. Following on, in 2001 Australia will celebrate its centenary of Federation which brought together a series of loosely associated colonies to form a Commonwealth of Australia. 2001 was also the year when many thought that Australia might become a republic and as a nation come to terms with its past. On 27 May this year, more than 250,000 people walked across the Sydney Harbour Bridge as a demonstration of reconciliation with the nation's indigenous people, the biggest demonstration of public will since the 1970s Vietnam moratoria. Sydney is now Australia's great public theatre. The roving nature of the Olympic Games has also meant that as a urban project, there was an opportunity to rethink the city. Sydney is stage ready, but now with added civic dignity. wa

Dr Philip Goad is a senior lecturer in architecture at the University of Melbourne and a contributor to Patrick Bingham-Hall's Olympic Architecture: Building Sydney 2000 (Watermark Press, Sydney, 1999).

■ Group GSA's
Sydney International
Shooting Centre. Zinc
and rough-sawn
wood with concrete
sound baffles
■ Public Domain,
Homebush Bay,
shows Stadium
Australia (near left),
Sydney Superdome
(centre) and the
complex's acclaimed
Floodlight Pylons

The construction industry, provided by Hanscomb

Construction outlook: Construction activity in Sydney has been overheated during the last two years, with demand for projects to be completed prior to the Olympic Games, and in the residential sector prior to introduction of a Goods and Services tax on 1 July. The 1999 inflation rate for construction industry was about 4.5% per annum with the 2000 rate projected to be about 5%.

Procurement of construction There are six basic contractual methods available.

Traditional tender: The owner selects a project design team to prepare complete design documentation. Tenders are then called for the building contract.

Competitive negotiation: The design team prepares building plans from the schematic to the preliminary working drawings stage. Tenders are called from a select list of contractors, and the selected tenderer joins the design team.

Cost plus contract: The building contractor contracts with the owner to complete the project in accordance with the contract documents at cost plus a percentage of the cost.

Design and construct contract: The owner requests a preliminary proposal, including schematic design drawings and an outline specification, from a 'package dealer', for design and construction based on the project brief.

Construction management contract: The construction activities are subcontracted on a competitive basis in direct contract with the building owner. A fee is paid to the construction manager for preliminaries and margin.

Novated contract: The design team is novated to the successful tenderer, who controls the completion of the design documentation.

Construction materials and methods

Design professions Typically, the owner appoints the project manager, who brings in the other consultants on the design team: architects, engineers (structural, civil, mechanical, electrical, transportation and hydraulic services), project managers, quantity surveyors/cost consultants. Some design professionals must be registered in Australia to practise.

Contractors General contracting is traditional, separate trade contracting is used depending upon the form of procurement. Large overseas-owned construction companies dominate the industry.

Governing codes and standards The Building Code of Australia is the principal requirement for construction in Australia.

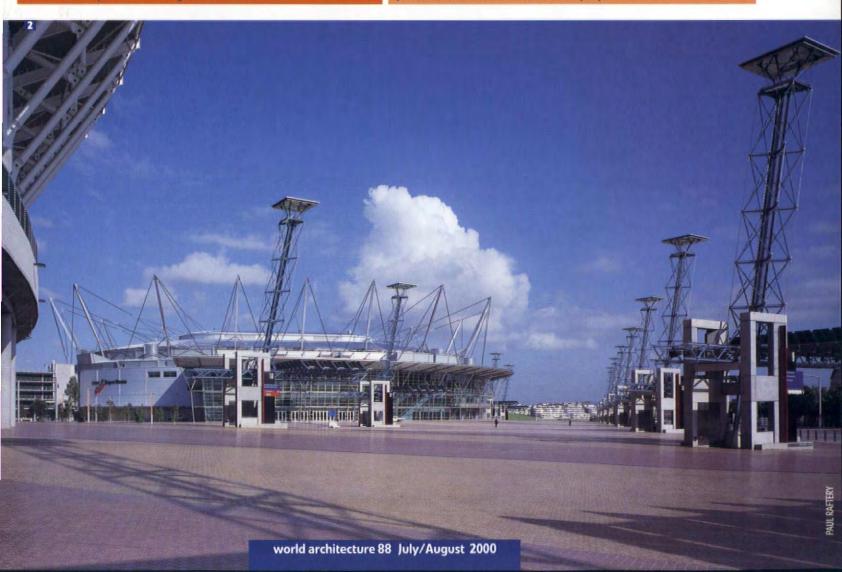
Material, labour and equipment None are not a problem. All materials are readily available in the Sydney area, although some are imported.

Favoured construction techniques There is a general preference for reinforced concrete structures for high-rise projects, with steel framed structures for larger span projects. Factory/warehouse structures will typically be steel framed with precast concrete, or block, dado walls with metal cladding above. Many civic structures feature 'architectural steelwork' in the design.

Websites

Royal Australian Institute of Architects: www.raia.com.au Australian Institute of Quantity Surveyors: www.aiqs.com.au Institution of Engineers Australia NSW Division: www.ieaust.org.au

wa and Hanscomb wish to thank Rawlinsons, Australia for assisting in the presentation of the information in this City Report.



Core skills

In the latest addition to downtown Sydney, Denton Corker Marshall has squeezed both street life and corporate requirements into an awkward site, and left plenty of room to breathe. **Anne Susskind** reports.

Sydney's newest office building, 363 George Street, does not command the best views in town—Renzo Piano's two towers going up on Macquarie Street (see pages 76-77) have cornered those. In fact, it has only glimpses of the water, in a town where water views are everything.

Its awkward site – buried in the core of the city, confined by odd boundaries, hemmed in on all sides by heritage buildings which had to be retained, and in some cases incorporated – was, say Richard Johnson and Jeff Walker of Denton Corker Marshall, the challenge. 'To show a way forward, proving that you can successfully develop a difficult site like this, adding a new layer while preserving what's there – that's what it's about.'

Their solution was astute: the tower has been pushed up above protected buildings, held aloft by brace-free steel columns which act as stilts, and using steel truss beams and a triangular support structure. Contained in the 30m-high void below is a 12m glass box (the lobby) and a public courtyard. Above is an 18m-high empty volume, and above that, the overarching tower finished in aluminium, glass and granite and housing 21 floors of office space.

To admit light, a seven-storey annex to a neighbouring building was demolished, as were the newer additions to a historic warehouse, neither of which were of intrinsic value. As a result, the sun streams through the building from around 11.30 and spills out on to the pavement, a rarity in Sydney's canyon-like downtown streets. Views from the lobby reveal the back elevations of the older buildings, which relate 'the story of the city, the grit, grain and texture of the city... deliberately not tarted up', says Johnson. Such a startling layering of eras is not often found in Sydney.

The glass lobby's support (a stainless steel stressed truss system) is light and minimal, bolted on from the outside, creating a neat box almost appearing to be part of the open space. To disguise the slope of its glass roof – necessary to shed rainwater – the lights are suspended on thin metal rods of different lengths, graded to form a horizontal plane. The eye is therefore tricked into seeing the uniform level of rods instead of the roof slope.

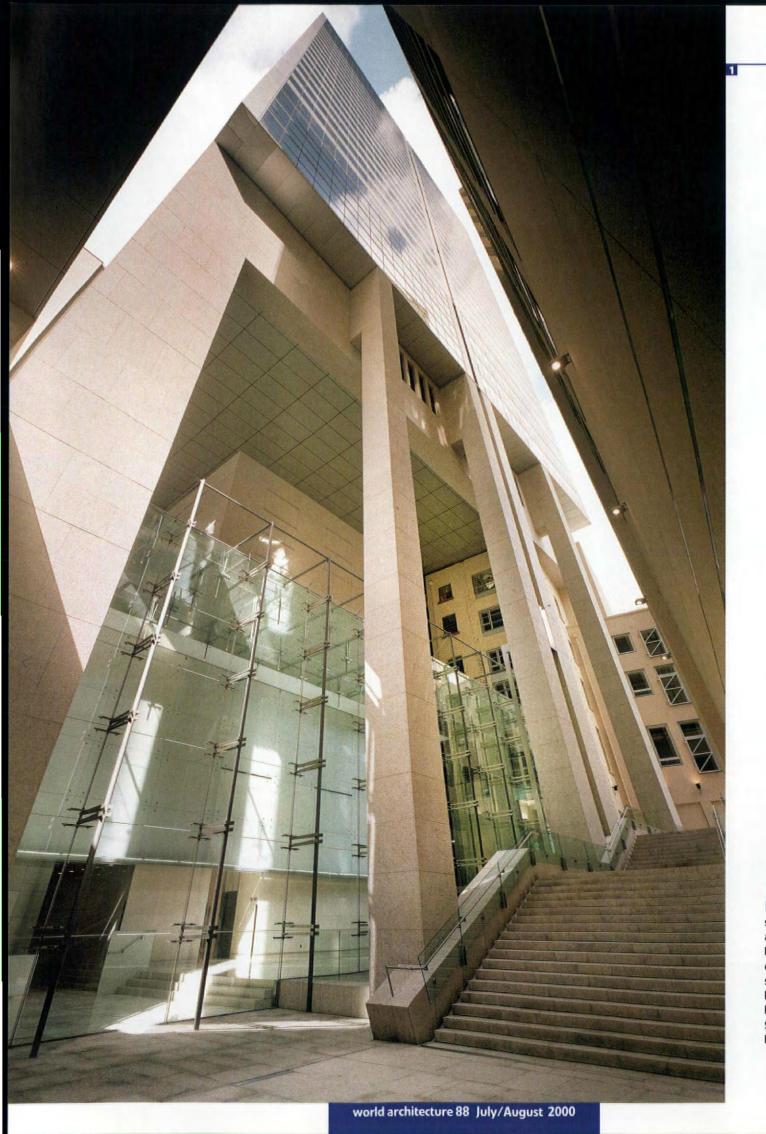
The developer, a consortium from New Zealand and Hong Kong, had wanted a fountain because water creates good feng shui. In the long thin space between the lobby and the courtyard is Waterswing, a water sculpture by Sydney artists Jennifer Turpin and



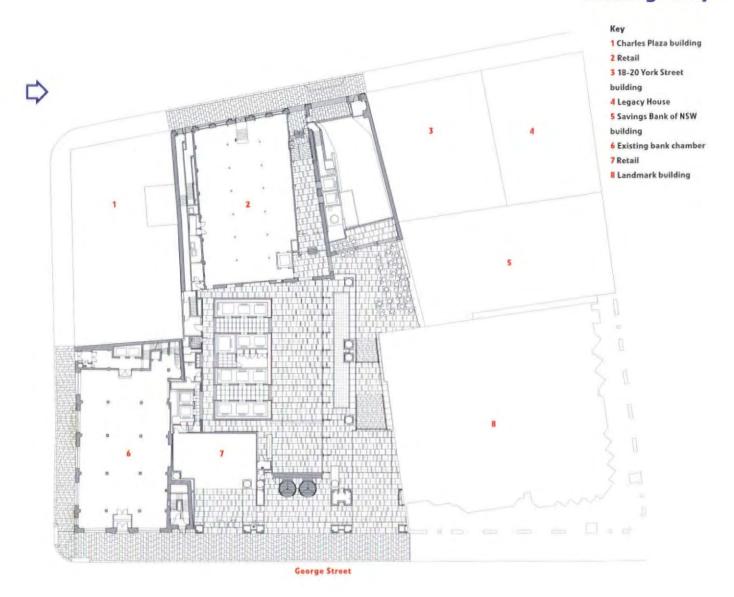


The 30m-high void beneath the tower is partially filled by a 12m-high glass box containing the lobby and public courtyard 2 363 George Street is held aloft by brace-free steel columns which act as stilts which act as stilts





To admit light a seven-storey annex a neighbouring building was demolished. View shows glass lobby to left and steps between 363 Georg Street and landmar building next door



Michaelie Crawford. The slender 12m-long stainless steel swing, belled out like a tulip to form a kind of seat at the bottom, hangs from two of the tower's huge support columns over a narrow 20m-long granite lined reflecting pool. It sweeps gently and rhythmically back and forwards, brushing the plane of black water, spraying it softly and so slowly that it looks to be defying gravity.

Recent Sydney City Council legislation requires all new towers to be set back from the street, with public space below the tower. Mostly these towers have been supported on podia, housing street-friendly activities such as cafés and retail. Some of the results are a bit unfortunate, dislocated add-ons with a skyscraper shooting clumsily out of the centre. Not so this building. The transition between its heavy horizontal street colonnade and the tower is mediated by an aluminium plate awning which cantilevers out above the colonnade, lined up with the cornice of a building next door making it more comfortable in the street. Also, because the tower's supporting columns are immediately visible, its structure is easy to understand.

The materials and colour palette of the new building blend with those of its neighbours. The sandstone of the colonnade, which matches the facade of neighbouring buildings, has been left at the 'gangsawn' stage, unpolished, with all the striations and saw marks creating more texture

and improving its weathering. Its black granite floor was chosen to match the city's new street paving.

The lobby floor is limestone, and the tower's cladding a putty-coloured polished granite. Stainless steel and aluminium inlays break up the facade, and DCM's trademark studs are apparent, travelling up the building, in different sizes on the granite and metal panels. In this building, they are not functional, but added on for effect. Johnson argues that they symbolically express the building's nature; that this is a building of bolted-together panels.

'If the visual logic of a building assists people to understand it, then the experience of looking at it is more interesting, it's more rich. If you just look at a building and you don't know whether a panel is granite or steel or cardboard or whatever, it's not as satisfying, it has no materiality. There is a big difference between the materiality of stone and the materiality of metal, so you detail each very differently. The granite is quite heavy, so it's got bigger beams and bigger bolts holding it back to the frame. All of those things contribute to a visual logic.

'It's trying to work with a language of accepting the qualities of the material and expressing them in the way that the building is put together and detailed. It's trying to make visual sense in the way nature makes sense. Sometimes you can break your own set of rules for dramatic effect,

building study



East elevation - from George Street

North elevation

but not too often, if you do it too much it becomes confusing.'

Below the glass-street level awning, which shelters pedestrians without blocking the skyward view above, is a grand pair of revolving doors encased in stainless steel drums instead of the usual glass cylinders. These act as part of 'a sequencing of experiences before you arrive inside, from the public footpath, through the colonnade space into the foyer'. An all-glass entry would lose that experience of transitionary space.

With 85% of the development already leased, the developer is happy, as is everyone else – a win-win situation, Johnson says. 'Everyone knows that creating a grand public space is also helping the prestige and importance of the commercial tenancy. When you can set an example where the public, the professional and the development lobby believe they've all won something, that's a good thing.' wa

Anne Susskind is an architectural writer living in Sydney. She is a regular wa correspondent.

Client/developer

Australian Growth Properties

Architect

Denton Corker Marshall, Sydney: Jeff Walker, Richard Johnson

Project manager

Incoll Management

Builde

Multiplex Constructions

Heritage consultant Brian McDonald & Associates

Structural, electrical, fire and hydraulics engineer

Connell Wagner

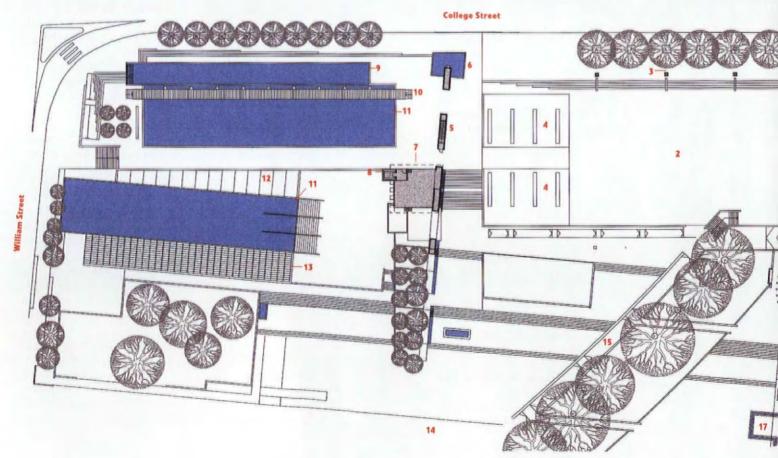
Mechanical engineer Lincolne Scott

Quantity surveyor Rider Hunt Sydney lobby showing stainless steel truss system and stainless steel twin drums housing the revolving doors

2 View in from the George Street entrance









Pools winner

Innovation in sports facilities has not been limited to Homebush Bay.

Anne Susskind tours the Cook and Phillip Centre, Sydney's biggest 'Olympic' project, by Bligh Voller Nield. Photographs by Anthony Browell.

An underworld of frenetic activity is buried beneath the calm of a series of water gardens

Plan of College Street terrace

Key

- 1 St Mary's Cathedral
- 2 Cathedral forecourt
- 3 Salvaged sandstone pillars
- 4 Tribune seats
- 5 Stainless steel wall
- 6 College Street water
- feature
- 7 Café
- 8 lift
- 9 Water garden
- 10 Timber boardwalk
- 11 Reflective pools
- 12 Glass gutter
- 13 Sloping glass louvres
- 14 Park
- 15 Boomerang walk
- 16 Car park entry
- 17 Northern water garden

by Annita Gleota

The Archbishop of Sydney, says architect Lawrence Nield, 'did not want to see anyone in Speedos' from the steps of Sydney's oldest cathedral, St Mary's. The blend of sacred and secular was the most difficult issue he faced in designing the Cook and Phillip Centre, Sydney's biggest urban project in the run-up to the Olympics.

The cathedral is a short walk east of the downtown high rises, separated by the oasis of Hyde Park, making it ripe for transformation for the residential population of the CBD, which has grown from 7,000 to well over 20,000 in the last decade.

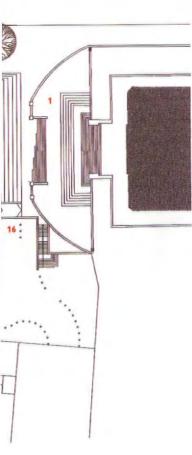
The site next to the cathedral – previously home to a quaint but tired bowling green, some gardens cut through by roads, and a traffic-congested precinct – had to include a recreation centre, with a large public pool, as well as extensive new landscaped parkland and a car park. The juxtaposition of a leisure centre with a cathedral was too great a leap for some minds to make, but Nield – of Bligh Voller Nield (Lawrence Nield and Partners at the time of the design) – believes he has achieved a successful meeting of mind, body and soul. The soul, represented by the 1862 sandstone cathedral, is joined in a continuous longitudinal axis with the mind, the Australian Museum, another historic Sydney sandstone building. The body, represented by the leisure complex, is tucked away beneath the square.

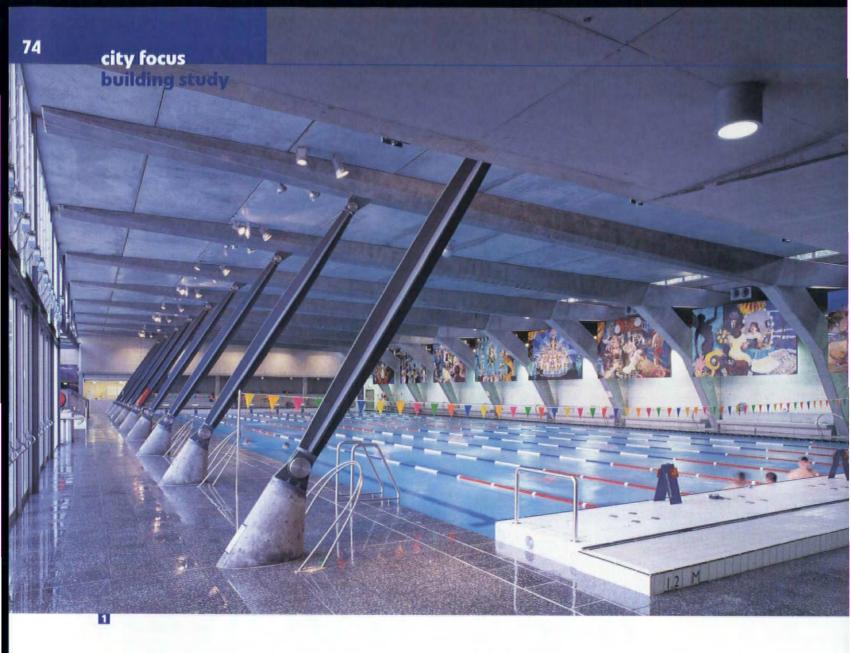
The centre is almost completely hidden. Approaching from the west, the city side, it is largely buried under the square, with the entry to the pool and park signalled by a tall water jet. It then unfolds down the terraced contour of the site, dug into the hill. It is hardly visible from the south, at the cathedral steps. From here a huge square – of a slate coloured Melbourne bluestone – begins as a ceremonial forecourt to the cathedral. It is concluded by two 'tribunes' – sloping ramps on either side of the connecting path to the museum – which, along with a stainless steel wall, camouflage the southern entry to the pool and park. The other forecourt material, for some of the small walls, or 'verticals', is sand-stone, which will oxidise to become a deep rusty orange colour and pick up the colour of the cathedral.

On the ramps are stone benches, designed for optimum viewing of weddings, funerals and state occasions in the cathedral. People looking down when walking between the ramps can see through large windows into the pool and basketball courts below, but otherwise the sacred and secular spaces are quite separate.

Beyond the ramps, on the part of the square which forms the pool's roof, is a water garden comprising three pools, the largest reflecting the entire cathedral facade. To add drama, a mist fountain dissolves the reflection of the new structures, so you see only the cathedral in a kind of Gothic fantasy.

Viewed from the hill, to the east, the recreation complex reveals itself as a considerable building. Although it is part underground, its 7m-high ceilings and louvre walls to the east (which open in summer) ameliorate the claustrophobia, as does a huge central skylight and a long window along one of the street edges. The pool halls have canted columns, looking like giant divers, supporting giant concrete beams. →





On the walls is a serious attempt at public art, via eight huge colourful paintings by Sydney artist Wendy Sharpe. They depict Annette Kellerman, who overcame polio to become a champion swimmer, swimming the Seine, the English Channel and the Danube, and finally coming back to Australia to work with children with polio. Nield says it is like a comic book to look at while swimming.

While many have welcomed the Cook and Phillip Centre with its bold masterplan as a positive contribution to the city, some believe that the program was too ambitious in the first place. The result is cluttered and confused, with too many protruberances into the public sphere. Nield counters that had he given no visual clues, noone would be aware of the life below the surface.

Whatever the case, the centre is already visited by around 18,000 people a week: evidence, if any were needed, that the people of Sydney have voted with their feet. wa

Architect

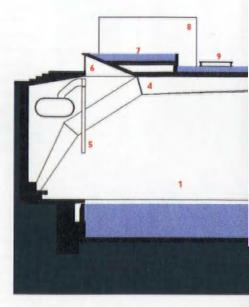
Lawrence Nield and Partners Australia Landscape architect Spackman and Mossop Structural, civil and mechanical engineers Connell Wagner, George Clarke & Associates Planning and management Graf Consulting International Consulting surveyor Peter Bolan & Associates General contractor Baulderstone Hornibrook ■ Canted columns in the pool support huge concrete beams.

Murals provide interest

Public space above the complex, with café in the background

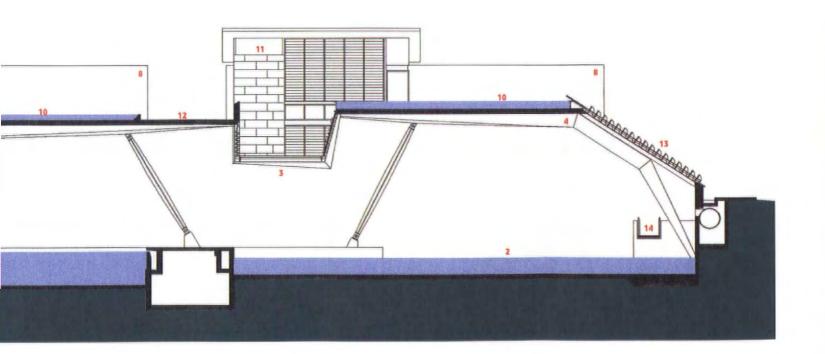
Key

- 150m pool
- 2 Leisure pool
- 3 Glass gutter
- 4 Precast concrete beams
- 5 Suspended mural by Wendy Sharpe
- 6 Skylight
- 7 Water garden
- 8 Stainless steel wall
- beyond
- 9 Timber boardwalk
- 10 Reflective pools
- 11 Café and lift beyond
- 12 Cathedral axis walkway
 13 Sloping glass louvres
- 14 Suspended walkway over leisure pools





Section through main pool halls



Aurora australis

Renzo Piano's Aurora Place building, nearing completion in Sydney, has taken on the challenge presented by speculative development. Designed for a developer-client with a long history in Sydney, and a constant eye on the bottom line, it is shaping up as a building that will push the parameters for this type of project.

Stephan Varady reports

It was a shrewd decision by client Lend Lease to engage an overseas architect with the credentials of Renzo Piano to design an office building on the site of the late-1950s State Office Block designed by Ken Woolley. Given its local status and reverence by many within the architectural community, it would have been a far more difficult proposition to engage a local Australian architect to replace that building. For an outsider, demolition was a fait accompli, and the emphasis of the initial approach could be shifted to a broader perspective.

Aurora Place is in very close proximity to one of the architectural marvels of the modern world – the Sydney Opera House. From the other side of the world, the significance of this location was such a force on Renzo Piano that his initial ideas were generated from his perceived 'dialogue' between the Opera House and this site, creating the sweeping curved structure of his design proposal.

As with all such projects, the economic demands of the design development, approvals, documentation and construction phases have massaged the form of the building into a more rational shape, but the wins along the way are still significant. The building has more open public space at street level; an efficient glazing system takes full advantage of the spectacular views across the Botanical Gardens to the harbour beyond, while limiting heat gain from the low eastern sun; apartments in the residential block are open at

both ends for greater light penetration, a variety of urban views, and more importantly, cross-ventilation; the office floor plate increases with the height of the building providing more lettable space on the levels that command higher premiums; a series of uniquely varied spaces are created at the uppermost levels; and there is a spectacularly symbolic top, something of a rarity in the uninspired roofscapes of plant and service equipment. One of the most notable features of the building are the enclosed balconies or wintergardens at the north and south ends of the office floors, allowing workers to step out for fresh air, a coffee break, a smoke or a more relaxed outdoor meeting. Despite initial scepticism, these have now become a vital marketing feature and a point of 'difference' in the status-conscious world of office tenancies.

In general, the office building has not been significant in shaping the Sydney skyline, with a few notable exceptions by Harry Seidler and others. More recently though, Denton Corker Marshall's Governor Philip Tower has set a far higher standard for the office tower and it appears Renzo Piano's Aurora Place is raising the standards again, showing that a commercial development can be economically viable and socially aware. It sets an example for a broader urban view to the tower block. And it is a building with a heart and a conscience aimed towards those that will live and work there, not just when it is completed, but well into the future. **w**a

Client

Lend Lease Development Architect

Renzo Piano Building Workshop

Design consultant

Ove Arup & Partners Hong Kong Models

S Rossi

5 R059

Design and construction team

Led by S Ishida

Structure and services consultant

Lend Lease Design Group Facade engineering

Ove Arup & Partners Residential building consultant

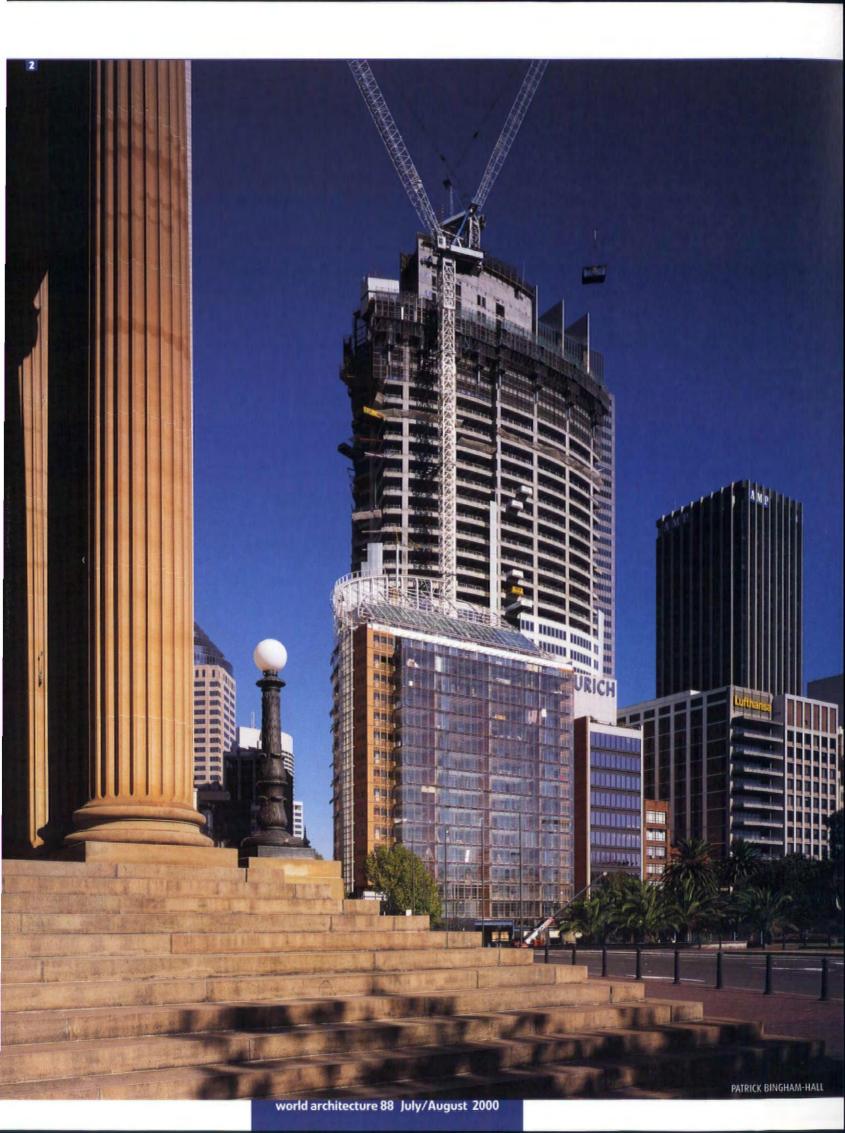
Taylor Thomson Whitting

sketch showing the office tower and Sydney Opera House The office tower (rear), and apartment block (front)

(XHun.

7 7

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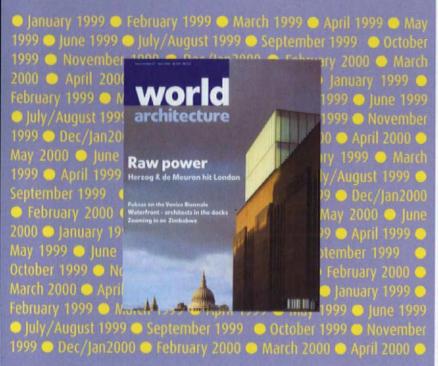
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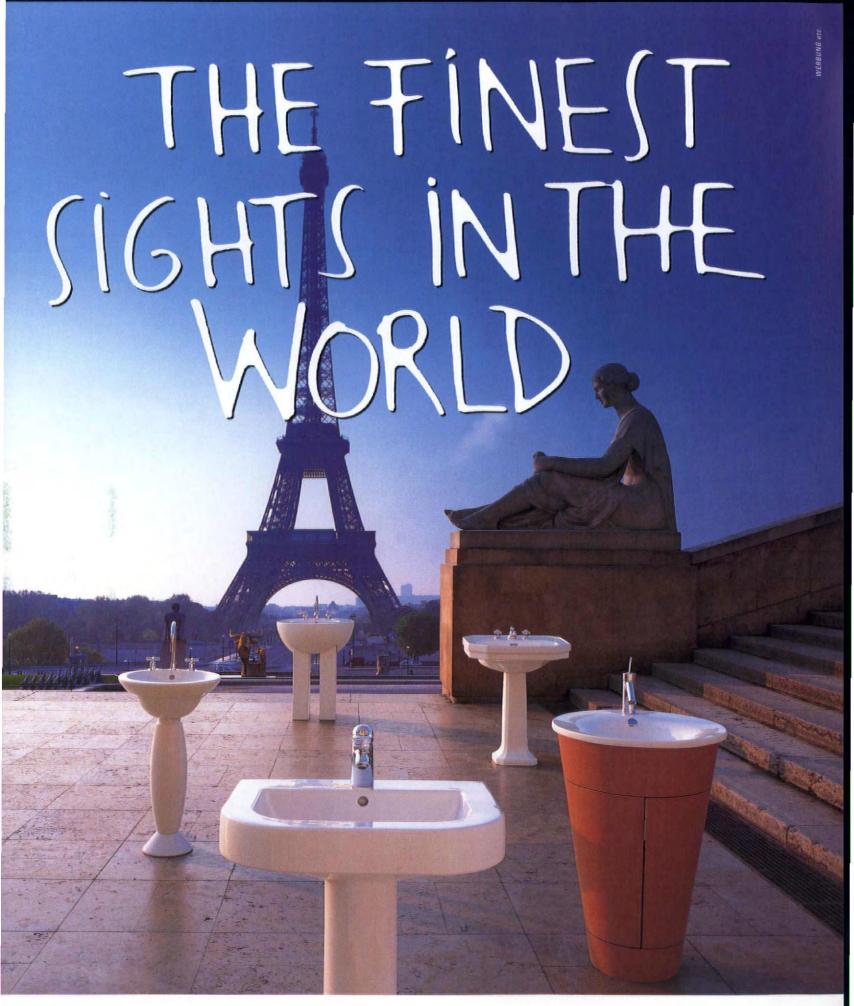
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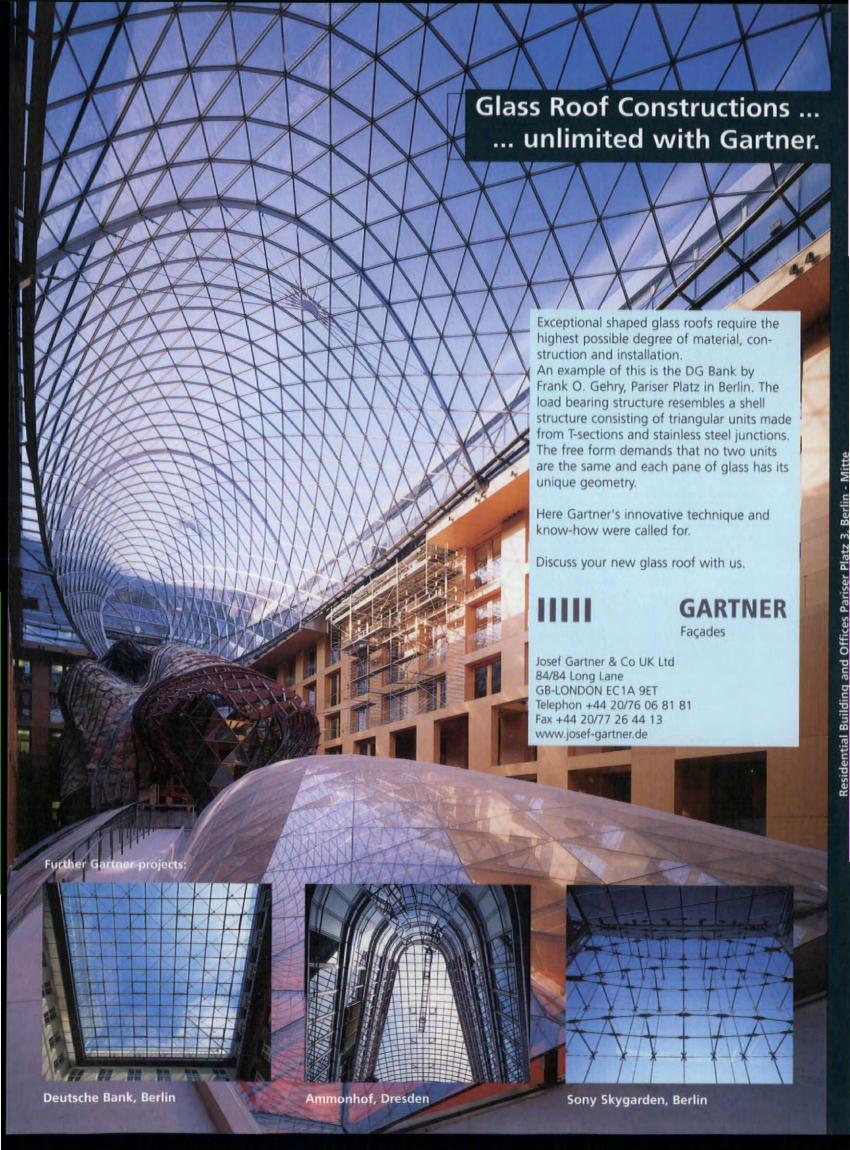
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Future Office Dynamics (FOD) – Advance from a personal computer to an integrated team computer





Future Office Dynamics

Furniture, from left to right: Connectable®, Design: Wilkhahn, Wiege, GMD-IPSI; Dynawall® Design: GMD-IPSI; ConiinChair®, Design: Wilkhahn, Wiege GMD-IPSI; Interactable®, Design: Wilkhahn, Andreas Storiko, GMD-IPSI

The development of information and communication technology is the driving force behind changes in the work environment. Internet functions, computer workstations and complex software systems define a new relationship between work time and workspace. Digital data is increasingly replacing paper as a storage medium, and multimedia is replacing personal presence. How to integrate information and communication technology in the complex interplay of work processes, furniture and equipment, architecture and human needs is a problem that still remains virtually unsolved.

The research consortium Future Office Dynamics (FOD) is examining these interrelations on the basis of concrete scenarios and is working on the development of corresponding solutions to provide complete integrated concepts. This is based on the research of the Integrated Publication and Information Systems Institute of the German GMD Research Centre (Institut fur integrierte Publikations - und Informationssysteme (IPSI) des GMD-Forschungszentrum Inforinationstechnik), on Wilkhahn's leadership in the field of the design-oriented furnishing of communications areas, and on the trend-setting studies on process organisation and planning interiors by the Quickbomer Team, an acclaimed team of consultants for planning and process organisation.

The widespread use of information and communication technology means that individual work depends more on the office building; in turn, however the need for personal communication and interactive, interdisciplinary co-operation is growing. That is why office buildings of the future must primarily serve the purpose of social interaction and co-operative forms of work, such as project and group work. FOD has developed the Roomware concept to meet this need. It involves the integration of information and communication technology in room components such as walls, doors and furniture units. In the Roomware concept, the computer as a device is moved into the background. Innovative displays provide large-format visualisation and work surfaces. The functionality of the computer goes far beyond use at an individual desk, as it is accessible in all communication and cooperative areas within a building.

The unique BEACH software of GMD-IPSI allows the advance from a personal computer to a team computer. Based on gestures and pens, it is simply a matter of course for several team members to engage in intuitive, co-operative work on the same display. The design concept – which was developed in collaboration between Wilkhahn, Wiege and GMD-IPSI – is based on the modular integration of Roomware, which can be added to existing Wilkhahn furniture

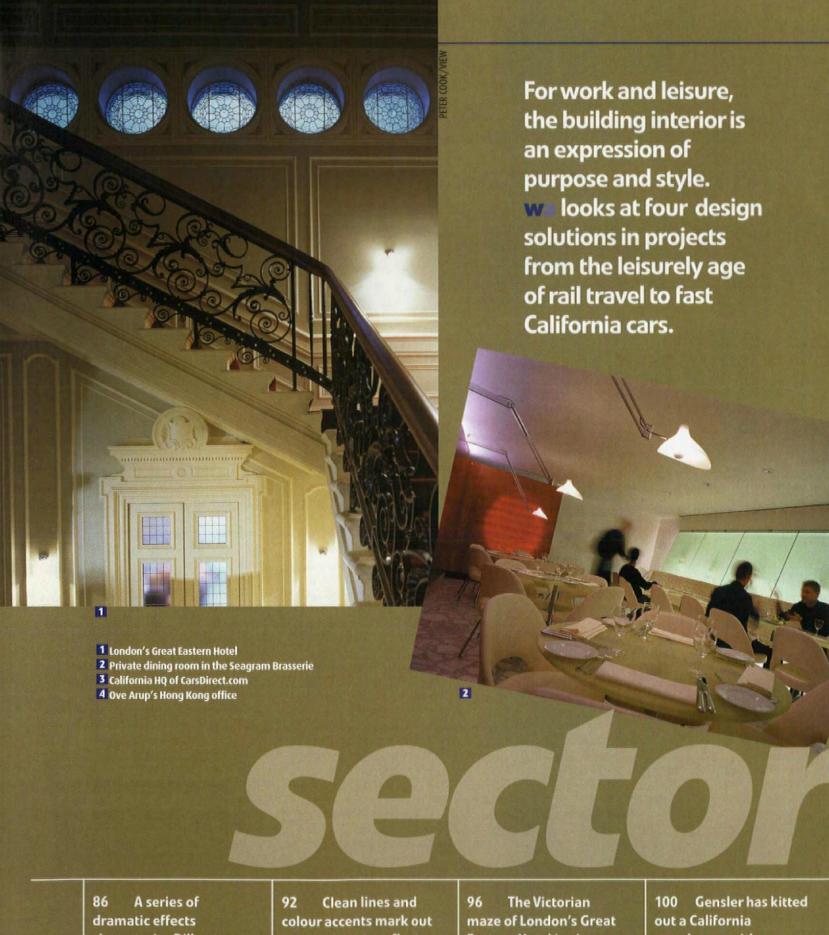
units and components and therefore be adjusted to rapid technological enhancement. All modules, such as DynaWall®, interacTable®, CommChairs®, ConnecTables® and InterWall®, are networked via an interactive, wireless connection. They are also mobile with a view to supporting the dynamic changeover from an open form layout to work in small groups.

Come and see the Roomware concept for yourself, the first of its kind in the world: an entire FOD Roomware environment will be shown at Wilkhahn in Eimbeckhausen near Bad Munder, Germany, from 1 June to 31 October, 2000, as part of the worldwide EXPO project. 'The future of work in the filed between humankind, nature, technology and the market.'

For further detailed information on FOD please refer to the DVA publication in German. Arbeitswelten im Wandel – fit fur die Zukunft?, ISBN 3-421-03232-7 or www.future-office.de

Wilkhahn

Wilkening + Hahne GmbH+Co Lm Landerfeld 8 31848 Bad Munder, Germany Tel: (+49) 05042 999- 179 Fax: (+49) 05042 999-284 email: vertrieb@wilkhahn,de www.wilkhahn.com



86 A series of dramatic effects characterise Diller + Scofidio's reworking of the Seagram's basement Brasserie in Manhattan

92 Clean lines and colour accents mark out team spaces to reflect the working style of Ove Arup's Hong Kong office

96 The Victorian maze of London's Great Eastern Hotel is given a 21st century identity by the Manser Practice and Conran & Partners

100 Gensler has kitted out a California warehouse with open and flexible work spaces for an energetic online car seller











Gin palace

Mies van der Rohe and Philip Johnson assured New York's Seagram building a place in the history books. Some 40 years later the redesign of its Brasserie fell to a relative newcomer, Diller + Scofidio. Nicola Turner reports. Photographs by Michael Moran.

Love it or hate it, Mies van der Rohe's 38-storey headquarters for Canadian distiller Seagram occupies a unique place in architectural history. Its bronze mullions and rivers of glass stretch ever upwards in an uninterrupted accentuated rectangle.

The 1958 Seagram commission offered Mies the first opportunity to realise his modernist theory in New York, having redefined the office block in Chicago. The result not only set a new agenda for the future of global corporate headquarters, but also ensured that this seminal building remains head and shoulders above the rest (albeit not in height) in a city that has erupted with skyscrapers of all shapes and sizes.

Although the exclusive plaza in which the tower is set is less popular today, it still gives the Seagram building a certain aloofness. Unlike the plaza, the restaurant in the stone base of the building, originally designed by Philip Johnson, has always been well-loved, and it still is. Diller + Scofidio's renovation of the restaurant has removed all traces of the original interior and, in the practice's words, 'respectfully challenges many of the tenets of Modernism'.

The New York practice won the commission for the restaurant thanks to the intervention of Phyllis Lambert – the architect daughter of the Seagram president who was also instrumental in Mies' involvement in the 1950s. She now heads Seagram's architectural review committee, and it was her dissatisfaction with the initial submissions for the renovation of Johnson's fire-damaged restaurant that led her to draw up a list of three New York architects she considered worthy and capable of the task in hand. ->



Diller + Scofidio got the job, despite having never designed a restaurant. The Seagram committee was anxious that the architectural pedigree of the building be maintained while the client, Restaurant Associates, was more concerned with the idea that good design sells. To choose avant garde architects is not in itself so surprising: the fact that design can sell has been proved over and over, particularly in cities such as New York. But Charles Renfro, project architect, agrees that the decision to employ Diller + Scofidio proved that the client was 'willing to take a risk'.

'The design process was a pleasant struggle. Obviously it took some convincing from both sides,' says Renfro. 'We hadn't done a restaurant before, so we didn't have the whole concept of what would or wouldn't work. Our approach wasn't economic, it was purely experiential, but we still managed to reach a point where we were all comfortable.'

Philip Johnson's original elegant, Modernist scheme confined the space to a single large dining room with one big, cool feature – a conveyor-driven food delivery system in the centre of the room. Renfro explains that Diller + Scofidio chose 'not to get caught up in the history of the place or the restaurant specifically' and decided not to go for 'one big feature'. Instead, it came up with a series of dramatic effects, which might just as well be called features, but which Renfro describes as 'a fabric, a weave of events'.

Arguably, the overriding feature is the 'wrapper' which envelops the main dining space. The madrone floor peels up to join the pearwood ceiling which peels down and is moulded into seating, creating a lining which serves not just as an aesthetic device, but as a structural and spatial component. The architect describes the relining of the rough concrete surfaces as 'the restoration of an old coat with new skins of wood, terrazzo, tile and glass'. In the private dining room (see pages 84-85) 'pearwood skins peel from the plaster ceiling and wall to become free-floating partitions which delaminate into illuminated veneers'. A 14.4m-long glass wall leans against one wall, supporting seats for 24 diners (despite the illusion of fragility), and sheathing a display of specially

A pearwood ceiling and madrone floor form a giant 'wrapper' in the main dining space
Individual booths are created by a rank of tipped, upholstered slabs

commissioned art works. The lenticular glass blurs all but perpendicular views.

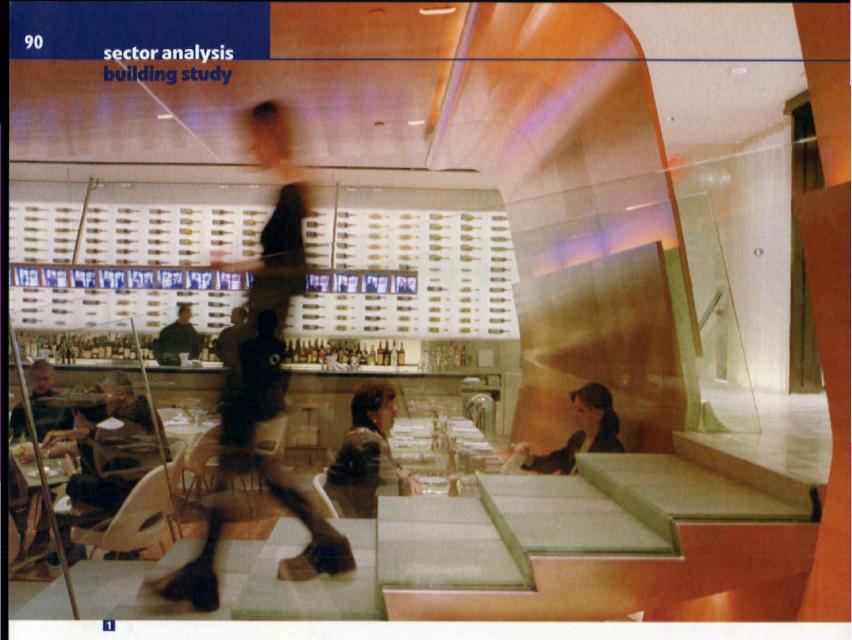
This is a restaurant that should be avoided for clandestine meetings. Everything is on show, including you. From the minute you swing through the doors at street level you can potentially be watched by every fellow diners. Ironically, the restaurant in the 20th century's most famous glass tower is entirely without windows. To introduce transparency into an otherwise cellular environment a sensor in the revolving door triggers a video snapshot of the unsuspecting customer which is then beamed up to a continuously changing display above the bar. Along this 'video beam' of 15 monitors, the most recent portrait takes up pole position and shunts the previous 15 to the right, knocking the oldest portrait off the end.

Theatricality and illusion dominate the experience, and both are exploited to the full in the dramatic glass staircase which gently falls into the centre of the dining room, providing optimum opportunity for embarrassment unless you aspire to slinking down a catwalk.

To the left of the staircase individual booths are created by a series of tall, upholstered slabs tipped up on end and propped on steel legs. To the right, the long bar, a new requirement by the client, is dominated by a glass light wall behind which row upon row of bottles of spirits march in the same direction.

The profusion of gestures or ideas threatens to confuse and overwhelm, but the giant wrapper succeeds in pulling it all together and settling the senses. This is the New York restaurant to see and be seen in. Whether half the clientele are even aware of the heritage of the building is doubtful; but you can be sure that a substandard design would never be sanctioned by the glitterati who frequent this eatery.

It's testimony to the diligence of Phyllis Lambert, Seagram, Restaurant Associates and Diller + Scofidio that a magnetic force still surrounds the Brasserie. One of Mies van der Rohe's many memorable quotes was: 'I don't want to be interesting, I want to be good'. Time will tell how good Diller + Scofidio prove to be. They're certainly interesting. wa

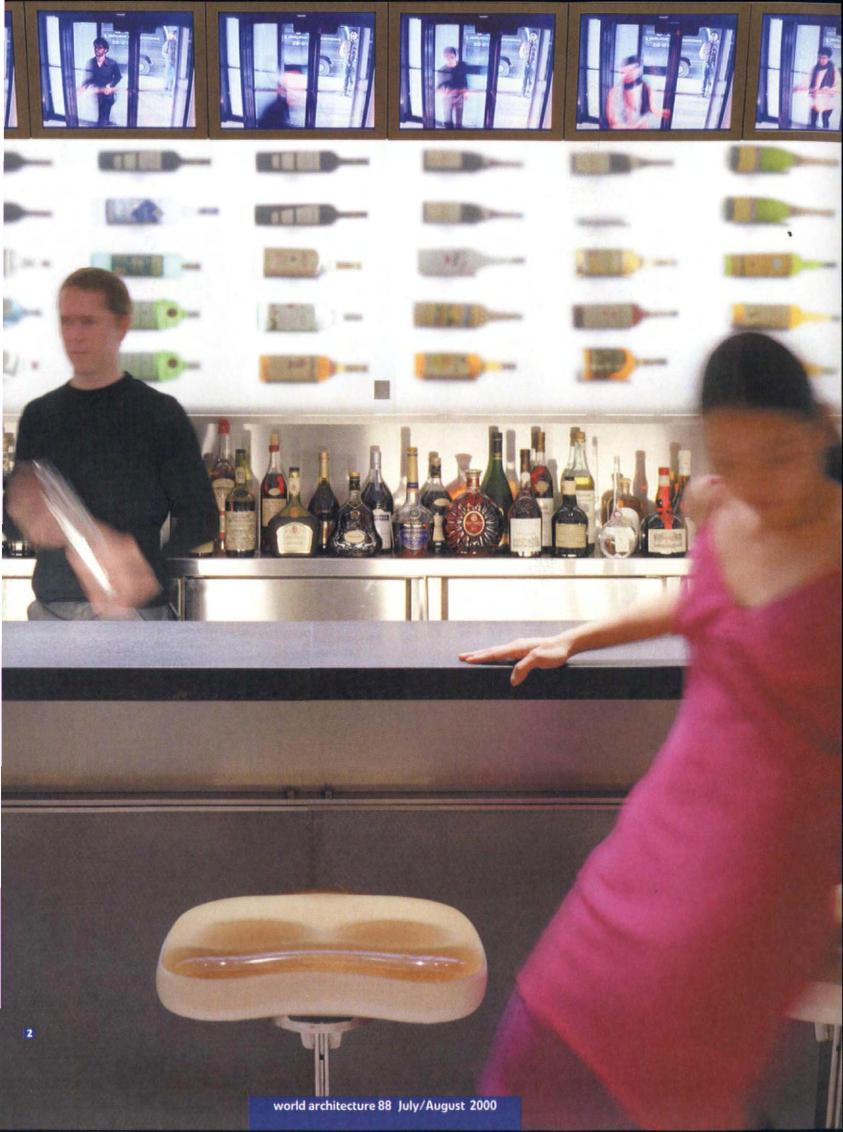


Johnson played down the 1.2m drop into the restaurant. Diller + Scofidio has mad it a virtue, with a catwalk-style staircase

2 To incorporate life on the street, and to announce each arrival, a 'video beam' runs above the bar. Tripod steel supports carry bar seats injected with medical gel

Client
Restaurant Associates
Architect
Diller + Scofidio (Charles
Renfro, Deane Simpson)
Structural engineer
Alan Burden
Lighting design
Richard Shaver
Script for entry
installation
Douglas Cooper

Curtain design
Mary Bright
Graphics
2x4
Artwork casting
Z Corporation
Outcast installation
Assisted by Matthew
Johnson

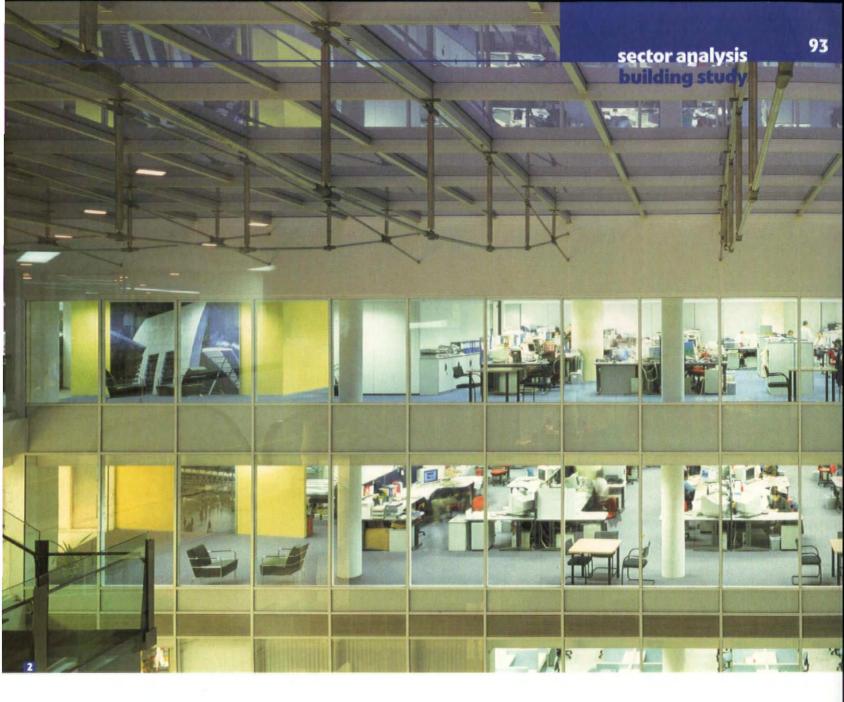




Pulling together

Interviewing everyone from the chairman to the tea lady helped DEGW create the required dynamic space for Ove Arup's new Hong Kong office.

By Ralph Thomas.



With its generous floorplate, six level atrium and open views,

Ove Arup & Partners' new offices are not what you expect in Hong Kong. More typical would be a slender tower, jammed with tiny desks, overlooking something similar. Arup moved there when it found its previous premises cramping its style. Director Peter Ayres observes: 'For a business like ours, there needs to be a lot of collaboration and for people to know what's going on in the firm at large.' With more than 700 people – working on structures, geotechnics, civil engineering, traffic, railways, M&E and project management – compartmentalisation was limiting interaction between workgroups.

The space chosen sits on top of Arquitectonica's spectacular Festival Walk retail complex in the foothills of Kowloon, beneath Lion Rock. 'We knew this building because we did engineering design on it,' says fellow director Jack Pappen. 'This was the only

building where we could see the potential for the office to be together.'

Arup believes in doing things properly, so brought in workplace guru DEGW to help develop the brief. 'We felt that it was important to have strategic planning,' says Ayres, 'to take advantage of the available knowledge on how buildings work. It's very easy to lay out desks. We wanted to do something better.' This didn't involve, however, any leisurely period of reflection.

'There was a very intense period of two weeks to understand the organisation,' recalls Andrew Currie of DEGW. 'The big point is that this is a complete reallocation of space, from conventional work spaces to a much wider menu. One of the main things was to create better team spaces. A lot of people have given up their [cellular] offices. For when they need to concentrate, we have provided small offices where you can shut away the world'. →

11 Different colours and flooring materials respond to the geometry of the building
12 Clean lines and bold graphics create informal team identities in Arquitectonica's building



Client

Ove Arup & Partners Hong Kong

Facilities planning consultant DEGW

Interior designer **CL3 Architects**

Main contractor

Isis Business Interiors (IBI)

Services engineer

Ove Arup & Partners Hong Kong

Charged with implementing the strategy was CL3 Architects. 'DEGW left us with a manual,' says CL3 design director Karen Young. 'It had interviewed staff from the chairman to the tea lady and did a whole pile of very impressive flow charts, spreadsheets and so on. It also set a timeline - three months from start to finish.'

'The planning did change quite a lot. It started out as 7,600sqm, and ended up as 10,400sqm.' The structure of the client organisation also required understanding. 'There are work groups. It was like dealing with separate companies within the company. We had to engage in great depth to understand the team dynamics.

'We went for clean lines; quite ordered, not too fussy. We also used large block colour accents and large, floor-to-ceiling colourtinted graphics.' Although each team area has a colour scheme, carpet colour boundaries respond to the geometry of the building and screen colour might be shared by more than one team. This informality works well, establishing a sense of location without fuss. Team identity is reinforced by the graphic panels - bold, well executed, monochrome photographs of key works.

Impressive though the work areas are, the public face is more stylish. 'We tried to keep the entrance very open and approachable. We had to fight with the landlords to have the big swing doors.' CL3 took an unusual approach to the building. 'Because Arup was the key tenant we tried to make the building appear to have been built for the company, rather than it just being integrated.' One consequence is the decision to take the white marble floor of the lift lobby into Ove Arup's reception, where it meets an expanse of strip wenge chocolate-brown timber before changing to carpet.

Beyond the reception desk lies a hierarchy of meeting spaces, increasing in formality from an area of armchairs under the polished stainless steel soffit of the escalators; to cantilever chairs around a

11 Impressive though the work areas are, the public face is more stylish

2 Operable glass wall to the boardroom ante-room

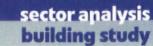




table in open space; the same furniture in small glazed rooms; and finally the adaptable boardroom and its ante-room. The latter two are defined by operable glass walls, the boardroom backenamelled, the ante-room with an apple green film. To one side, another enormous pivoted glass door leads to management offices.

Up the escalator is a café area with white counters on wenge bases. A large glass door offers glimpses into the well-resourced knowledge centre. Around the atrium are DEGW's breakout areas, where engineers can interact without disturbing their co-workers.

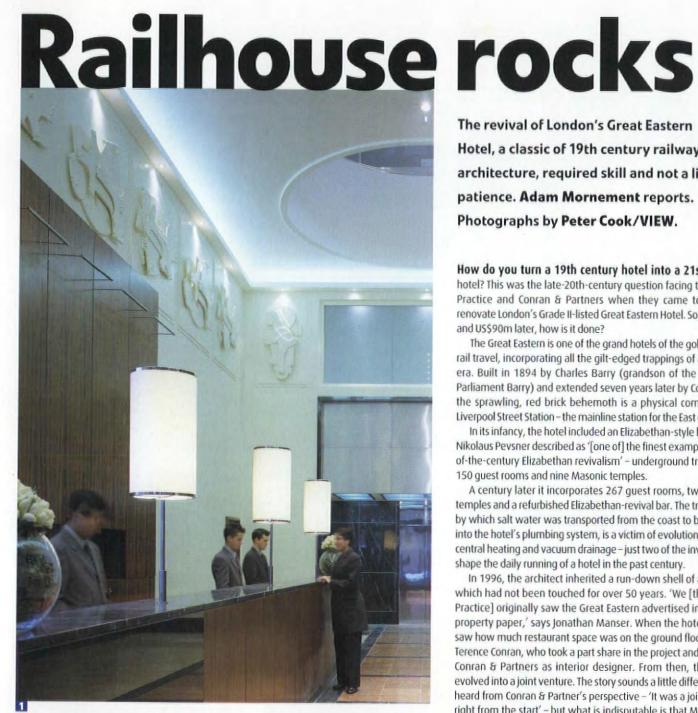
This design gives Ove Arup the flexible context needed to support the ebb and flow of multi-disciplinary projects. Everybody can see the scale of the organisation, which is presented in a progressive and open way, compatible with its lofty ambitions. wa

Ralph Thomas is an architect and writer living in Hong Kong

Typical floor plan

Key

- 1 Open plan office area
- 2 Void
- 3 WCs
- 4 Bridge



Entrance lobby 2 Full-height skylight which, along with the lift-shaft, represents a dramatic physical intervention in the 19th century original

Client Great Eastern Hotel Company Architect The Manser Practice Hotel concept and interior design Conran & Partners Project manager **EC Harris**

Quantity surveyor Davis Langdon & Everest Structural engineer Alan Baxter Associates Services engineer Upton McGougan Contractor Laing

The revival of London's Great Eastern Hotel, a classic of 19th century railway architecture, required skill and not a little patience. Adam Mornement reports. Photographs by Peter Cook/VIEW.

How do you turn a 19th century hotel into a 21st century hotel? This was the late-20th-century question facing the Manser Practice and Conran & Partners when they came together to renovate London's Grade II-listed Great Eastern Hotel. So, four years and US\$90m later, how is it done?

The Great Eastern is one of the grand hotels of the golden age of rail travel, incorporating all the gilt-edged trappings of an opulent era. Built in 1894 by Charles Barry (grandson of the Houses of Parliament Barry) and extended seven years later by Colonel Edis, the sprawling, red brick behemoth is a physical component of Liverpool Street Station - the mainline station for the East of England.

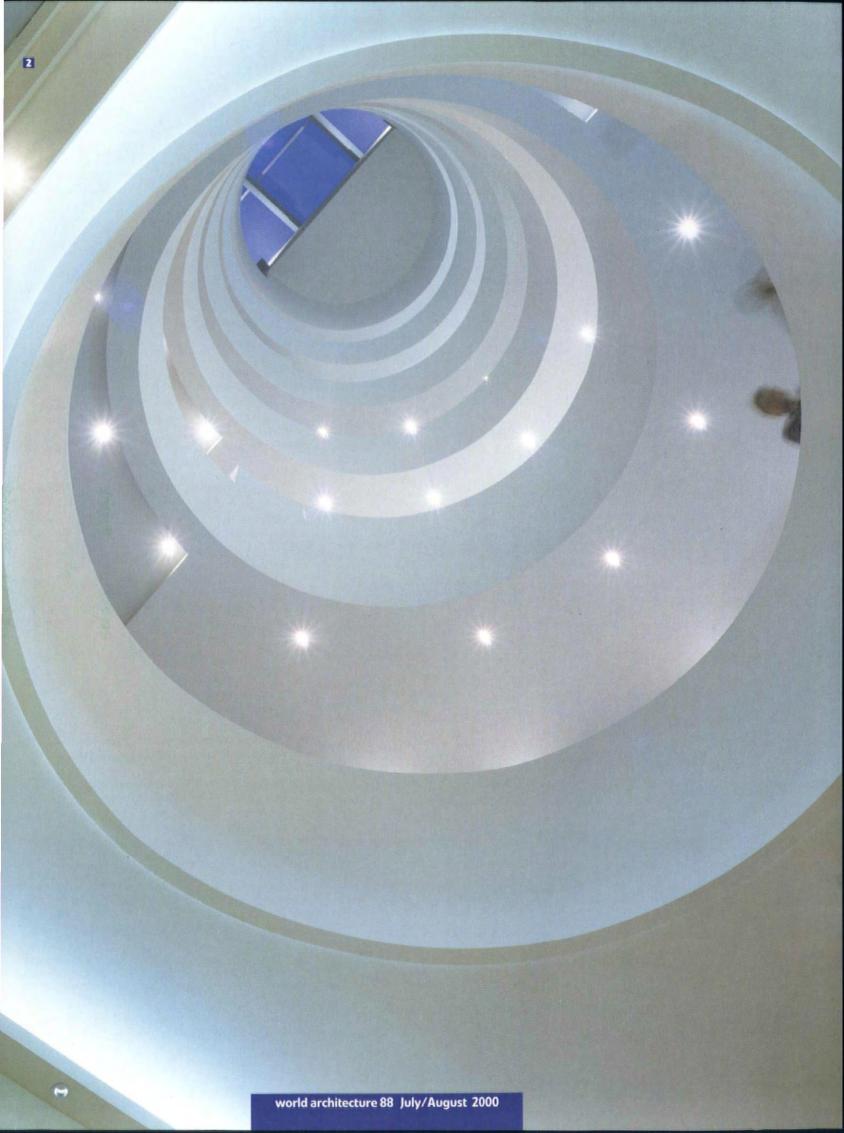
In its infancy, the hotel included an Elizabethan-style bar - which Nikolaus Peysner described as '[one of] the finest examples of turnof-the-century Elizabethan revivalism' - underground train access, 150 guest rooms and nine Masonic temples.

A century later it incorporates 267 guest rooms, two Masonic temples and a refurbished Elizabethan-revival bar. The train access, by which salt water was transported from the coast to be pumped into the hotel's plumbing system, is a victim of evolution, mainly to central heating and vacuum drainage - just two of the inventions to shape the daily running of a hotel in the past century.

In 1996, the architect inherited a run-down shell of a building, which had not been touched for over 50 years. 'We [the Manser Practice] originally saw the Great Eastern advertised in a London property paper,' says Jonathan Manser. When the hotel's owner saw how much restaurant space was on the ground floor, it called Terence Conran, who took a part share in the project and drafted in Conran & Partners as interior designer. From then, the project evolved into a joint venture. The story sounds a little different when heard from Conran & Partner's perspective - 'It was a joint venture right from the start' - but what is indisputable is that Manser was responsible for exterior renovation, and the space, shape, volume and form of the building. Manser effectively created the canvas for Conran's interior design and hotel concept.

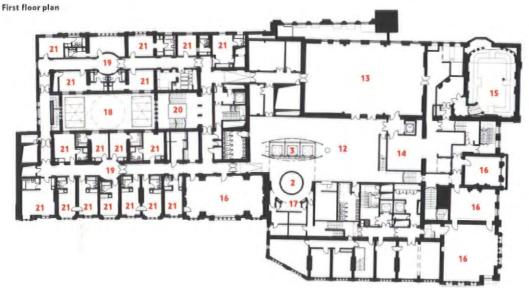
The most significant structural interventions are apparent in the slick, wood-panelled lobby. The entrance (the hotel's original entrance now leads into the Aurora restaurant) was moved along Liverpool Street. 'We needed to insert a full-height lift shaft. It was the only place that this was possible,' continues Manser. Previously, the lift-shaft was located in the Western Wing, and extended only to the third floor, making the upper storeys inaccessible and disorientating. Locating the lift shaft in the Eastern Wing has made both the basement levels and two upper storeys accessible from an individual shaft.

The insertion of a full-height roof light both filters natural light through the hotel and acts as a point of orientation. As Manser says,









Key

- 1 Lobby/reception
- 2 Full-height rooflight
- 3 Lift shaft
- 4 Aurora restaurant
- 5 Terminus bar
- 6 Original entrance
- 7 Loading bay
- 8 Miyabe Japanese food bar
- 9 The eorge (Elizabethanstyle pub)
- 10 Fishmarket seafood restaurant
- 11 Oyster bar
- 12 Atrium
- 13 Conference room
- 14 'Beachy Deck' café
- 15 Masonic temple
- 16 Banquet/conference
- 17 Reception to business
- 18 Lightwell (over Aurora restaurant)
- 19 Listed corridors
- 20 Listed staircase
- 21 Guest rooms

'With a hotel of any sort, clarity of routing is everything,' – particularly in a Victorian maze. The five-storey, top-lit void, punctuated by circular and square bedroom portholes, recalls Ricardo Legoretta in its flat planes of colour and cuboid dimensions.

The first floor atrium is the Great Eastern's 'big surprise'. It functions as the lobby to the hotel's conference suite, with a wall-height projection screen (for moving graphics), and incorporates the small 'Beachy Deck' café – first of the many themed bars and restaurants throughout the ground and first floors.

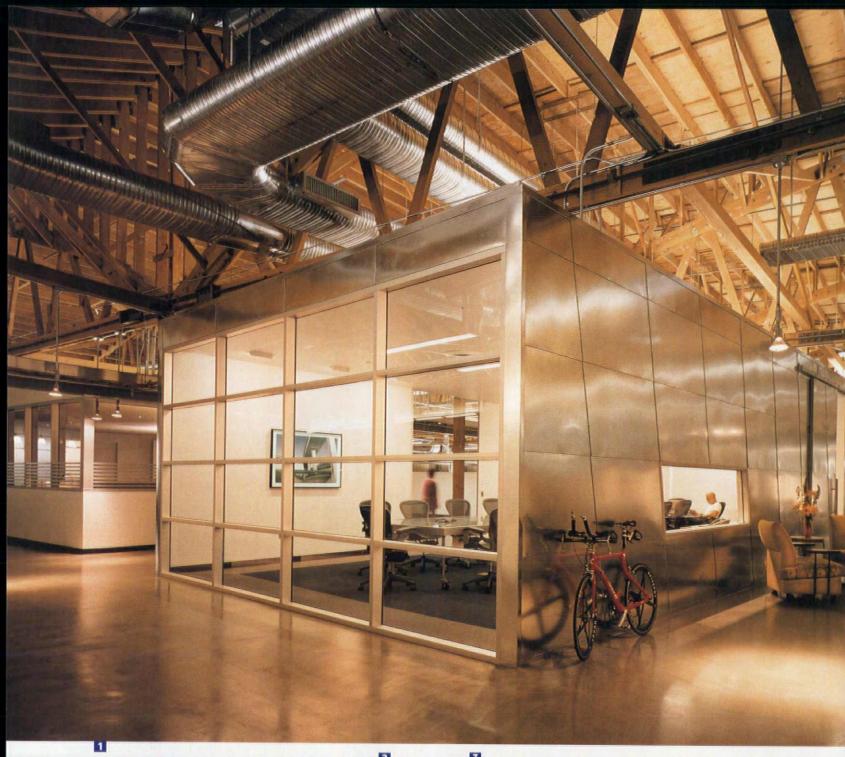
From the ground floor lobby, the visitor is only seconds away from a wood-panelled Elizabethan-style pub, compact seafood Japanese cafeteria or palatial dining room. The hotel's public areas are a confusion of shapes, styles and sizes. 'What I'd like to feel is that it's not taking on a themed hotel environment, but that it includes references to themes,' says James Soane, Conran's project director. The Aurora is the hotel's main dining room, discreetly restored by Conran to give a real sense of the luxury of the original Great Eastern. An ornate glazed cupola has been painstakingly exposed – after being blacked out during the Second World War – creating a surprising amount of natural light. In total, there are four restaurants and three bars.

The Great Eastern is the only hotel within London's Square Mile, a fact reflected in Conran's concept. 'In terms of creating an identity, we tried to combine City and creative elements,' says James Soane. This reflects Liverpool Street Station's geographical location, sandwiched between Shoreditch and Hoxton – headquarters for London's fashionable, young 'creative' types to the north, and the City to the south.

For the rooms themselves, Conran took its inspiration from the luxury of early 20th century first-class rail carriages. Stained hardwood and stainless steel fixtures and fittings are flush to the walls; all contents have a clear and streamlined purpose; and superfluous decoration or ornament has been kept to an absolute minimum. No two rooms are the same, although those on the two upper storeys, which have been almost totally rebuilt, have a fresher, lighter feel than the more ornately Victorian lower storeys.

So, is the Great Eastern circa Y2K a success? Well, yes. The combination of drama and diversity in a such a complex shell is a significant achievement – particularly in the face of Grade-II listing. And in the areas where coherence may be slightly lacking, restraint becomes apparent. The last word goes to the architects. 'The Great Eastern is a major project for us. A lot of energy and patience has gone into it,' says Soane, content in a job well done. 'The constraints and size of the building mean't that it was never going to a radical, cutting-edge project. But the result is a workable and elegant hotel for the 21st century,' says Manser, not sounding quite so sure. wa

Trive-storey atrium on the first floor, recalling Ricardo Legorreta in its combination of flat planes of colour and cuboid forms







Direct hit

Gensler's California HQ for CarsDirect.com, completed in only four months, reflects the client's business – low-budget, quirky and flexible. By Alice Kimm. Photographs by Benny Chan/Fotoworks

Open, flexible facilities are what today's dot-com companies demand, both to accommodate rapid growth in personnel as well as ease communication between employees and customers. CarsDirect.com, an on-line service for the purchase of automobiles located in Culver City, California, is a prime example of the genre.

The company held a three-day invited competition to design a 4,300sqm interactive, flexible headquarters within an existing warehouse shell. The space both had to establish CarsDirect.com as having a permanent market presence and create an energetic culture in which to nurture a growing pool of employees.

Gensler, a firm known more for its high-end 'finished' corporate interiors, won the competition and was responsible for designing and delivering the project in less than four months. At the project's inception, CarsDirect.com employed 50 staff. When it was ready

for occupancy, there were approximately 350 new personnel.

The result reflects the company's work ethic. CarsDirect.com operates simply and speedily, moving products to market quickly. Its customers navigate fluidly through its website, attracted to the company's straightforwardness and efficiency. Correspondingly, the new headquarters has a clear organisation. It encloses groups of open workstations divided into two main categories: one side of the warehouse is devoted to customer-related services; the other houses development, market research, in-house finance and accounting services. A central, metal-clad boardroom with full web-based communications and audio-visual presentation capabilities provides a formal focal point within the large space. For clients, the boardroom is a reassuring benchmark within the sea of open workstations.

Elsewhere, a kitchen provides in-house lunches every day, and

1 The central, metalclad boardroom is a focal point for the large space 2 E computer models of the data spine 4 The space, an existing warehouse, is divided into two main categories



world architecture 88 July/August 2000



Client
CarsDirect.com
Architect
Gensler
General contractor
Tectonics
Mechanical/electrical
engineer
Syska & Hennessy
Mechanical subcontractor
Acco-air

Customisation of each workstation by the user adds warmth to the environment

a large outdoor area is available for staff to enjoy their meals in the Southern California sunshine. Employees as well as customers and visitors move through the space freely and openly. Workstations are situated around a data spine that feeds periodically into partitions containing power sources. Heating and air-conditioning are fed through exposed ceiling ducts weaving in and out through the existing timber open truss system. General lighting is suspended and dropped down between trusses. Open conference areas punctuate the space. The overall effect is one of organisation, but not tight control: efficiency is important, but fluidity and flexibility are as well.

To fit the client's tight budget, Gensler used readily available building blocks. Workstations were inexpensively customised by furniture manufacturers limited to the use of in-stock, recycled and

sustainable materials. The use of primary colours for shelving units, floor coverings, and furniture adds vitality; more warmth is introduced through the personalisation of each workstation. Gensler's framework allows for this – plants, photographs, and paraphernalia do not clutter the space, but accentuate the communal culture of the workplace.

Design and construction were phased to accommodate CarsDirect. com's scheduled move-in dates. The first phase, the customerservices half with 150 workstations, was designed and built in 60 days. The remainder of the project, was completed and occupied in 80 days. In true, speedy dot-com fashion, Gensler delivered the goods – raw, dynamic, and in keeping with its client's personality. wa

Alice Kimm is an architect and writer living in Los Angeles

Inside knowledge

There's very little architecture that doesn't involve an element of interior design. Here **Hanscomb** provides a checklist for the design of offices, restaurants and hotels to reflect our choice of projects in this report.

Types of interiors

Offices Internal finishes range from the functional, with suitable specification carpeting, simple insulated gypsum board walls and a proprietary ceiling system, to the grand with seamless glazed walls and hardwood wall panelling. With the advent of more specialised furniture systems, the favoured openplan office is moving towards a flexible cellular approach. Integral furniture partition systems have allowed the layout of the office to be easily and inexpensively reconfigured to suit the changing needs of an organisation. With high densities of staff and equipment, offices must be comfortable all year round, with adequate air-conditioning and proper ventilation. Excellent communications are the backbone of any modern office. A system which can expand with a business is essential.

Restaurants Style and quality are the overriding factors, both tied to the market sector of the restaurant. A fast food outlet, a

lunch spot and a brasserie for evening use all have individual requirements. Generally, floor finishes should be durable and safe and ceilings smooth and simple, however they are dressed up (see Seagram Brasserie pages 86-91). Fixtures, fittings and furniture should be of the highest quality as they become conspicuous if not in good order. Heating, air-conditioning and ventilation are critical.

Hotels As with restaurants, the type of hotel decrees the level of interior. Consistently though, transit areas should be bright and as large as reasonably possible; finishes, especially the floor, should be good quality; and fixtures and fittings carefully selected. Rooms should have all basic amenities. The size of the rooms and the quality of interior must be in line with the level of hotel itself, with the mix of room types determined in advance via a market study. As guest rooms now tend to double as small business suites, adequate power outlets and easy to use, reasonably priced communications are essential.

Design challenges

Offices With interior fit-out budgets normally tight, the challenge is first to create an office which satisfies client needs, then to use colour and light to best effect. Using integral furniture partition systems or semi-permanent full-height partitions is often used to achieve the correct layout while retaining flexibility to adapt the office space in the future.

Restaurants With budgets normally based on the proposed return on the investment, typically the interior of a restaurant requires completion under tight but adequate constraints. Discreet integration of ventilation into a smooth ceiling usually requires

creative solutions. Likewise fixtures and fittings need careful specification to ensure that a suitable interior is created without unnecessary clutter.

Hotels If a chain hotel, the main design challenge is to retain the image of the particular chain without producing a stale variant. In transit areas a bright, fresh design is usually preferred, with speciality functions requiring subtle changes for variation. Guest rooms should be well laid out and functional particular themes may be applied to certain blocks of rooms to offer variety, although this can present certain operational disadvantages.

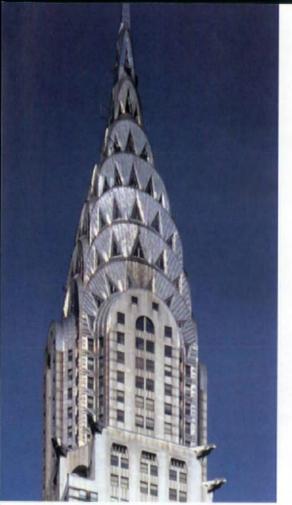
Cost considerations

Offices The main cost factor is material type and quality. Carpets, partitions, ceilings, fixtures and fittings (especially electrical) have a considerable impact on overall cost. Prudent specification can considerably reduce material costs with only minimal effect on the finished interior. Amendments to base building engineering services installations can also be significant – as sometimes the layouts are governed by the base-building services themselves. A flexible office interior is usually more expensive to construct than a rigid fixed interior, although the lower costs of any future remodelling should be taken into account.

Restaurants On the basis that the interior finishing specification is carefully controlled to ensure adherence to the available budget, an adequate allowance for appropriate fixtures and fittings must be made at the outset of the project and not

compromised. As the procurement of fixtures and fittings tends to be one of the latter project tasks, if due allowance is not made at the outset it can cause serious design issues later. Allowance for adequate environmental control within the restaurant should be made at the outset too, as the retrofit of such systems is more expensive and extremely disruptive to the running of a business.

Hotels Lighting and air-conditioning systems need to be well positioned and properly specified in communal areas. As the guest rooms themselves are all variants on a theme, repetition brings notable advantages of economy in all areas. Allowing unnecessary variations to specifications loses any procurement advantages. Fixtures and fittings throughout the building should be of the highest quality. As with restaurants, proper allowance should be committed at the outset and not be compromised later.



Is this the end

1928-1932

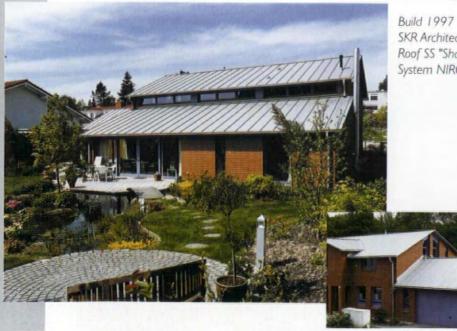
Chrysler Building, N.Y.C.

Build 1928 - 1932 Architekt Van Aaken Roof SS 304 Nirosta®



Private Quarter, Bochum

Build 1997 SKR Architects, Bochum Roof SS "SharkSkin" 316 L System NIROSTA-Metalldach®



1997

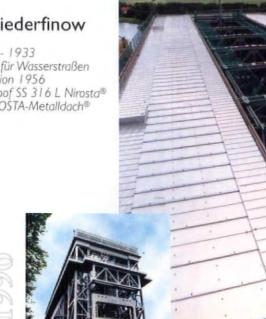
Services of ASSC

Roof Seam Welding Equipment Stainless Steel, Sheet/Coil Ware Titanium, Sheet/Coil Ware SS-Tubes OD 12 - 70 mm Wall-Thickness 0,5 - 2,5 mm "SharkSkin" No Reflection Surface Stainless Steel Titanium



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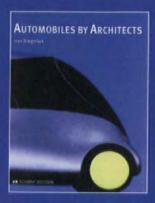


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Stay Inspired...



Charting the impact of the architect on the design of the automobile...

Automobiles by Architects

IVAN MARGOLIUS, UK

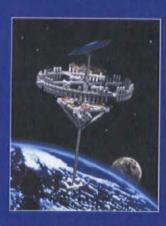
The car has long touched architects' imaginations, appearing to them as accommodation on wheels. This book examines the impact of the automobile upon our lives and the aspects of

designing which have been crucial to the architectis involvement. It features the 2CV designed by architect Boulanger as well as designs by Philippe Starck, Edwin Lutyens, Frank Lloyd Wright and Future Systems.

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Manhattan Lofts

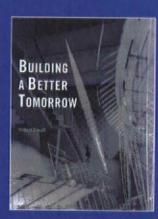
IVOR RICHARDS, University of Newcastle School of Architecture, UK

The New York City Loft has

become a tradition. It is possible today to look back at the evolution of the loft as an architectural type that has influenced the whole concept of the New York apartment dwelling, particularly the nature of its space. This book presents a critical review that is set within the context of a group of ten different architects who have generously showcased their exemplary work - ranging in style from minimalist to opulent and sophisticated

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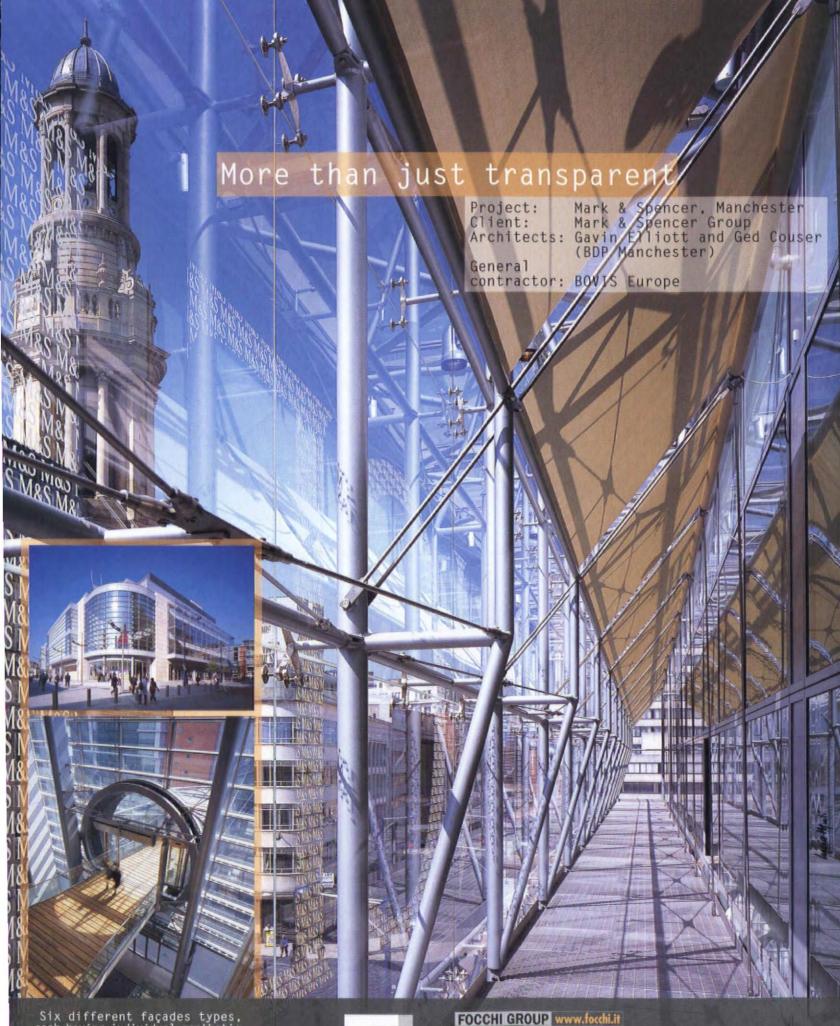
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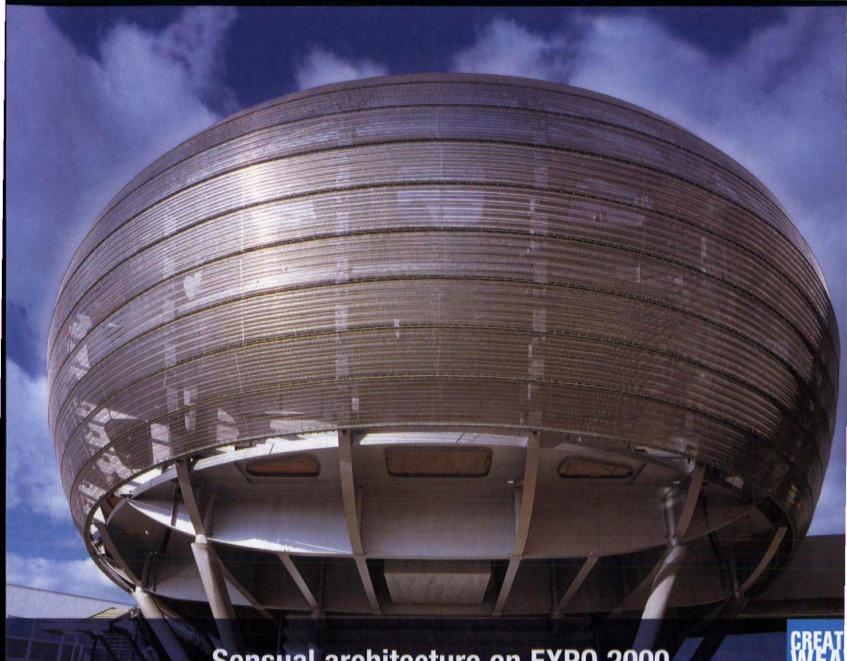
Six different façades types, each having individual aesthetic, technical, and performance characteristics, reflect the varied personality of the largest shopping centre in Europe (Marks & Spencer in Manchester).



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Sensual architecture on EXPO 2000

Iridescent interplay between light and clouds: Shining like silver, the stainless steel wrap of Bertelsmann Pavilion "Planet m - media for the world" captivates the onlooker. Gleaming silk, translucent curtain, glistening ice - the mosaic of associations gives the material a vivacity which reflects the fascinating visions of EXPO 2000.

Architect: Karl Karau of Triad Architects with Axel Büther and with Becker, Gewers, Kühn & Kühn Architects

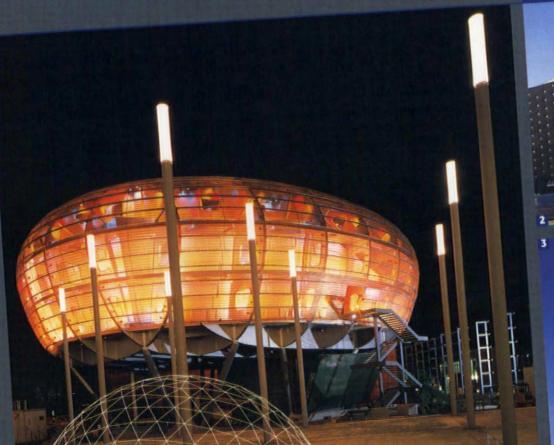


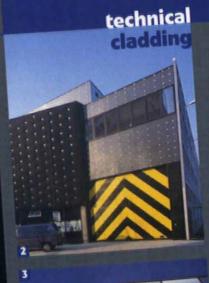
Design: Escale



Metallic fabrics

GKD - Gebr. Kufferath GmbH & Co. KG . Metallweberstraße 46 . D-52348 Düren Phone: ++49 / (0) 2421 / 803-0 . Fax: ++49 / (0) 2421 / 803-227 www.gkd.de . e-mail: gb3@gkd.de







- 1 Planet M Pavilion, Germany
 2 Popcluster 013, The Netherlands
 3 Development Centre Ingolstadt, Germany
 4 Cosmocaixa, Spain

110 Popcluster 013 architects, black rubber and rock n' roll in provincial Holland

The Planet M Pavilion touches down in Hanover

Fink & Jocher 113 scoops the Dupont Benedictus Award with the Ingolstadt **Development Centre**

114 There's no shortage of new cladding products, but are there any new ideas? World Architecture surveys the market

Rubber band stand

You've seen titanium cladding, and know how expensive it is. You've seen recycled cardboard cladding, but don't quite believe that it works. So how about rubber cladding? It's a new one on us – but Benthem Crouwel's Tilburg concert hall proves that it's cheap, effective and could just catch on. Dan Fox explains.

Through the ages, rock stars have been caught in some pretty compromising positions, but in Tilburg, in The Netherlands, you can see them all clad entirely in black rubber. No, it's nothing to do with on-stage outfits or backstage frolics – it's all about good old facade technology. Benthem Crouwel's Popcluster 013 shows that rubber as a metaphor for deviance works in architecture, as well as fashion.

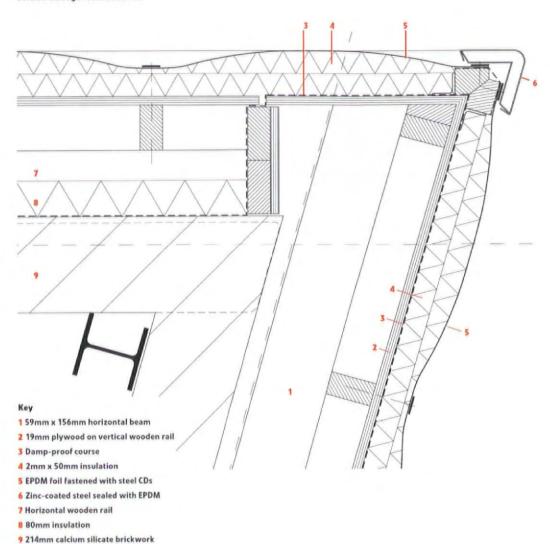
The Popcluster's rubber exterior instantly sets it apart from the surroundings of its tight city centre site. Its pleating and padding are modelled on a Chesterfield sofa, and the fixing points are real classical CDs. But it's not the look that makes it so popular with the locals: its acoustic insulation is second to none, leaving well-to-do neighbours blissfully unaware of the latest lank-haired rock combo cranking up their amps and clattering their way around chords A, C and D.

Popcluster was commissioned by three local organisations dedicated to the patronage of rock music, who wanted the building to reflect the elusive underground cool and distinctive identities of rock's musical sub-genres. 'The client wanted something special,' says Peter van Rooij, who designed the building along with Mels Crouwel and Jan Benthem. 'They recognised that there is a degree of risk involved in commissioning something so different – but once they'd decided to go for it they supported us throughout the development process. Nobody's done anything like this before.'

Benthem Crouwel wanted to explore the possibilities of creating a softer, more textured finish to the non-load-bearing facade than the usual futuristic-looking shiny metal, sheer glass or photovoltaic panels. To do this they used profoundly human references (CDs, sofas) and scale. The practice found that EPDM (ethlyne-propylene-diene-monomer) – a synthetic rubber commonly used for waterproofing in roofing, could be hung in the desired pleats – and set about devising a complete facade system around it, along with facade manufacturer Hertel of nearby Kampen.

1 Rubber and mineral wool secured by CDs
2 The Popcluster's south facade and vehicle entrance





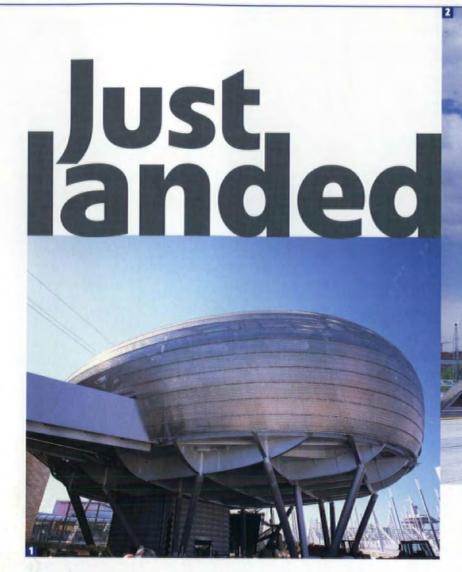
The multi-layered skin also contains mineral wool, plywood and waterproof coatings. 'The budget was small, so we had to come up with a cheap way of making a structurally sound exterior,' says van Rooij. The wall is filled with mineral wool, selected over stone wool because its fibre structure will keep the padded effect defined. The EPDM membrane, vulcanised and reinforced with glass tissue, was then hung down the side of the building. The CD attachments (functioning CDs made from a sunlight-resistant plastic and coated for waterproofing) were pushed into the membrane and screw- fixed. A thin layer of glue attaches the rubber to the mineral wool, which is mounted on a waterproof multi-plywood frame.

The Chesterfield effect was produced by tightening the nut with a washer until the mineral wool had been compressed from 50mm to 10mm. 'We had wanted to do something with lights on the exterior, but weren't sure how that would affect the rubber. The client liked the idea of using CDs to create a link from the exterior to what happens inside the building. During the day you get rainbow reflections from the inner rings.' The total thickness of the facade varies between 400mm and 900mm, depending on acoustic demands, with extra cavity walls in some places.

The rubber section of the facade extends around three faces of the main concert space, and across the roof, effectively covering one of three volumes, and giving the impression of a slewed black box set inside a steel and glass bracket. Even the edges and partitions are steel coated with self-adhesive EPDM. The roof also has a padding effect, but the pleating had to be abandoned because the folds would have retained too much water. The fourth facade is a more conventional glass and steel system.

'The people either love it or hate it,' says van Rooij. 'The locals are happy though – the sound reduction really works. And it acts as an icon for the city – cultural projects just don't get built in the south very often.' Will the rubber system catch on? 'It's economical, and it will last for 50 years, but you need a very special kind of client because it's a very special style.'

The Popcluster is the largest venue of its type in the country, holding 2,200 spectators, with parking for 440 bicycles. Innovative spatial hierarchies (rooms can be linked together or double up as sound insulation areas) and effective circulation are two other popular complements to the design. But rock music is about anything but efficiency, and Benthem Crouwel's unconventional solution reflects the anarchic underbelly of the music. wa



Three new space-age buildings with ambitious new cladding concepts have just opened in Europe. By Dan Fox

■ Planet M Pavilion, Hanover Expo

Becker, Gewers, Kuhn & Kuhn Architekten with Triad Architekten

Steel fabric producer GKD had to develop new manufacturing plant to realise Hanover Expo 2000's Planet M Pavilion, which opened in June. Architect Becker, Gewers, Kuhn & Kuhn Architekten and design agency Triad designed the circular silver volume, suspended on steel stilts and clad in reflective silver stainless steel Eskale mesh. The pavilion, a showcase for multimedia concern Bertelsman, becomes transparent at night under a spectacular lighting array of 850 halogen lamps.

GKD founding partner Stephan Kufferath says: 'Try to cover an egg with a handkerchief, and you'll see the problem.' The solution, a three-dimensional filigree spiral which winds around the frame, has 440 individual components and 360km of wire. It was manufactured on a modified wire weaving loom, to specifications of a local shipbuilder, which designed the structure in the same way as an upturned hull.

The product is rustproof and resistant to abrasion, and can be precisely adjusted and tensioned. Seamless widths of up to 8m provide potential for applications of a far greater scale.

www.gkd.de

2 Cosmocaixa Esteve Terradas, Robert Terradas & Joseph Ferrando

Last month Madrid welcomed a new addition to its skyline, in the form of a giant silver 'spermatozoon' clad in 1,500 mirror-polished stainless steel panels. The extension to the Alcobendas Science Museum was designed by Spanish architects Esteve Terrades, Robert Terrades and Joseph Ferrando, with Spanish engineer and cladding manufacturer Bellapart, a specialist in geometrically complex structures.

Bellapart devised a technique for cutting the panels to the same size, down to the millimetre. With such a complex shape, any variation in the dimensions could have been disastrous. A linking system attaches brackets and washers to the three corners of each triangle, while lengths of rubber run between the panel edges to seal the facade.

'We worked with Bellapart because it is good at combining modern materials with organic forms,' says Joseph Ferrando. 'Essentially we chose a circular form because it relates to the footprint of the original building, but the public prefers to see it as a comet bursting through the roof.'

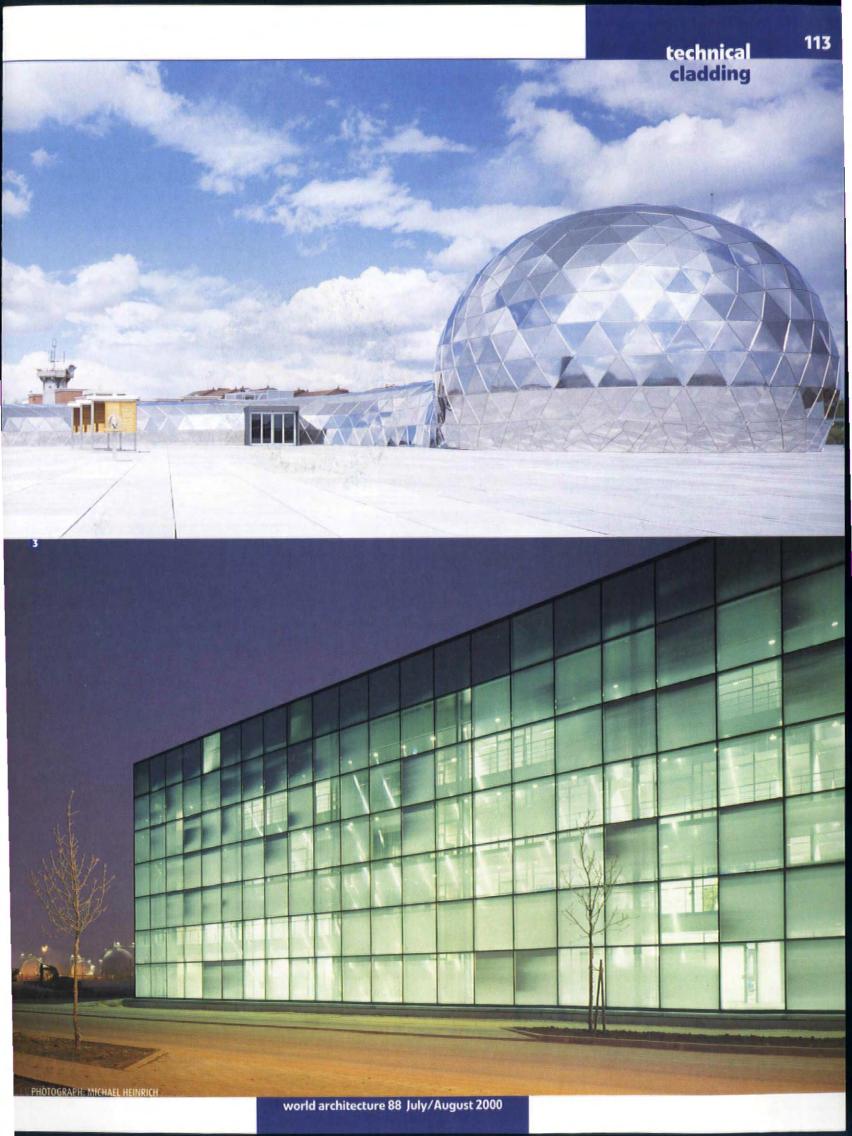
www.bellapart.com

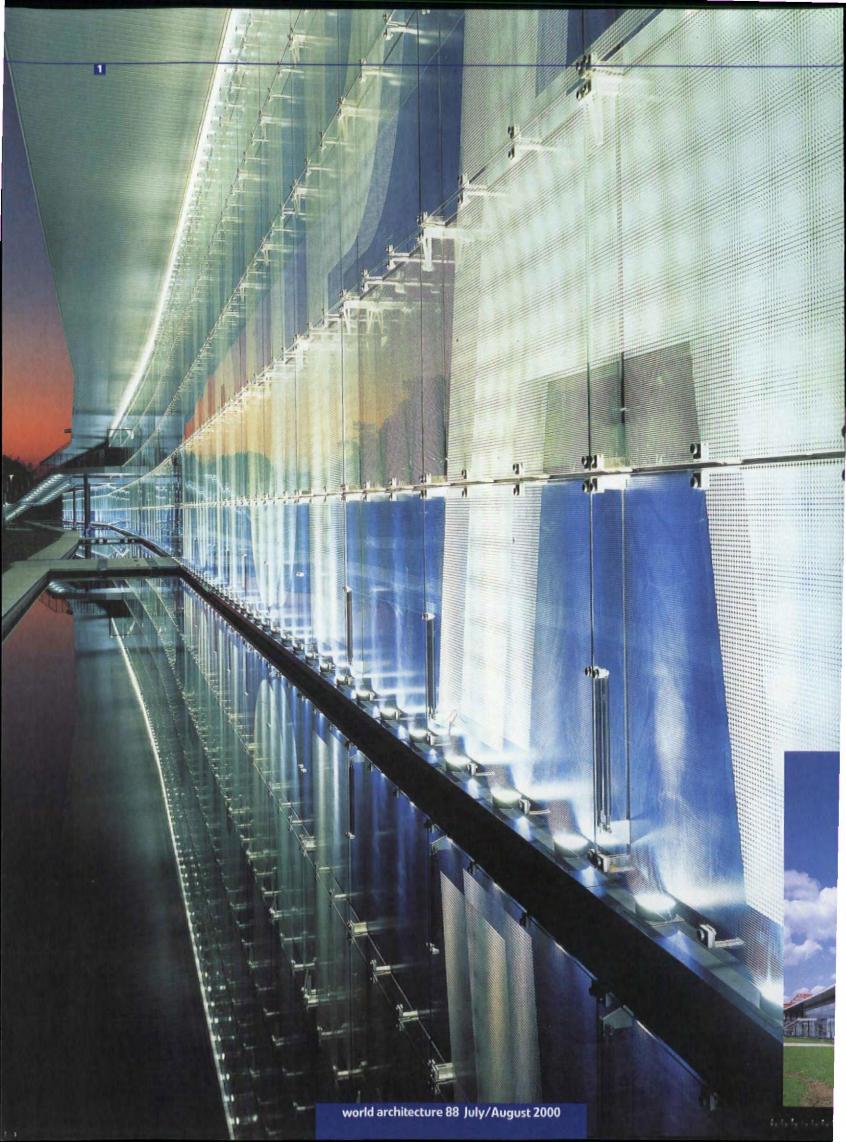
☑ Development Centre Ingolstadt Fink & Jocher

Munich practice Fink & Jocher's Development Centre Ingolstadt has just scooped the main prize in the DuPont Benedictus Awards for use of architectural glass. The south-facing glass facade is central to the building's low-energy design – but what impressed the judges was that despite that dominant concern, it loses nothing in architectural purity. 'A constant process of discussion among architects, planners and engineers resulted in a design that took into account the form, structure and glass facades, as well as the involved climatic concept,' says Mattias Schuler of project engineer Transsolar Energietechnik.

The 'buffer zone' concept uses the glazed area as an air circulation space, as well as an atrium. To minimise glare, highly reflective louvres are integrated into the double glazing, supplied by Austrian firm Flachglas, while an infrared coating on the inner layer of glass controls heat gain. Air enters the building via an underground cooling duct. Warm air is channelled though the office floor into the atrium cavity and exits via an exhaust above the glass facade. On the north facade, titanium-zinc standing seam cladding with motorised ventilation flaps, from VM Zinc, regulates the air-flow further.

www.flachglas.de www.vmzinc.com





Glazing out in front

Spectacular glazing innovations seem to have made cladding advances the preserve of the Europeans. World Architecture looks at some of the best solutions of the last year.

If there's one thing that is clear when surveying

the world's most advanced commercially-available cladding products, it's the dominance of European manufacturers. It is easy to speculate why: In the US traditional brick remains more fashionable; the world's technical avant-garde are European design figureheads (names like Foster, Ingenhoven and Otto roll off the tongue); European Community scientific development subsidies are unusually generous ... the list goes on. Whichever way you look at it, the market in Europe sustains an impressive number of cladding firms conspicuous for their commitment to pushing the latest technology.

Germany is widely regarded as a showcase for facade technology, although a surprisingly large contribution of expertise to the current stock of futuristic projects has come from elsewhere in Europe. Nonetheless, to develop a cladding system that is lauded as sophisticated in Germany takes some doing. Italian curtain wall manufacturer SPS (www.sps.it) and German design firm Schweger and Partner succeeded in doing just that in Frankfurt earlier this

year on the tightly curved facade of the Helaba Headquarters Tower, Europe's second tallest building.

specialists, supplied the external skin of the tower, which combines motorised sun-tracking shades with a unique opening window ventilation system designed specially for skyscrapers. Opening is automatically regulated according to climatic conditions. At the press of a button, the windows can be opened outwards up to 200mm horizontally. But in very low temperatures, rain or strong wind, the windows close automatically and cannot be opened.

The skin took two years to develop. It consists of two single panes, each 10mm thick. The sides are vacuum-coated with metal-oxide and the space between the panes filled with the inert gas krypton, which allows it to fulfil the highest European standards for sound and heat protection. The main tower uses 20% less power than conventional facades and plant – a huge saving.

The clear tempered float glass panes for the Helaba Tower were prepared by Sunglass (www.sunglass.it), also no stranger to glass bending feats. The company developed the glazed capsules for Marks/Barfield's London Eye. The 8m x 4m pods are designed for 360° visibility, and each contains 11 different designs of laminated safety glass pane, produced with 14 bending moulds. Amazingly, the company supplied the panes in 141 days.

Another Italian cladding manufacturer made its mark in Bavaria last year when Focchi (www.focchi.it) developed the Radiant Facade, an

off-the-peg take on the hypersurface trend, for Massimiliano Fuksas' Salzburg Europark Shopping Centre, Austria. The reconciliation of commercial architecture and socio-cultural ethics has long been one of Fuksas' chief concerns.

An out-of-town business park site with little discernible context has spawned one of the architect's favourite works. He designed the Europark 'proceeding in sections from the inside to the outside', treating the facade as the grand finale. And grand it is – characterised by a double-skin with the EUROPARK logo fritted white on blue glass and illuminated spectacularly at night.

The first skin acts as a thermal break system, which assures, through structural silicone technology, a homogeneous external surface which conceals the opening and fixed parts beneath. The uniformity of the exterior skin is essential for the realisation of the logo, which is made up of letters 9m high and 4m wide.

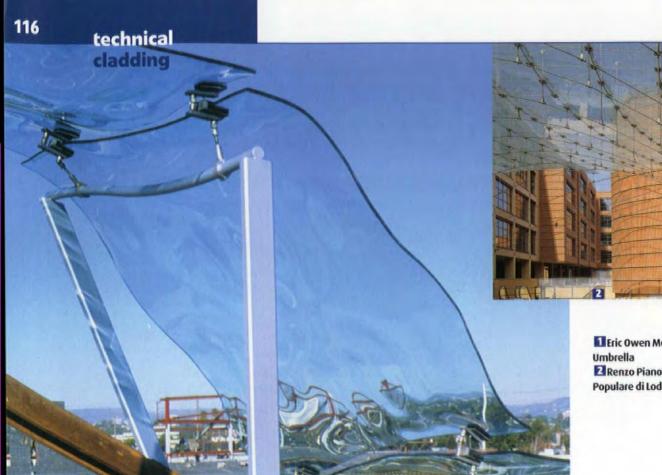
The second skin is a pane of fritted glass anchored by aluminium fusion to the external skin. Double fritting on the outside of the first skin and on the inside of the second gives the logo its depth, with the lighting located in the cavity of the double-skin. All the mechanisms and the ironmongery of the smoke exhaust are concealed.

Focchi has also just finished the spectacular bullet-proof suspended glazing system for Renzo Piano's long-awaited Banco Populare di Lodi. The elegant terracotta and glass facade and gravity-defying suspended concourse canopy have



■ 2 Massimiliano Fuksas' Europark ■ Helaba Headquarters Tower by Schweger and Partner

world architecture 88 July/August 2000



Eric Owen Moss' Renzo Piano's Banco Populare di Lodi

drawn gasps of wonder from newly installed staff.

Schüco (www.shueco.de) continues to forge ahead in the eco-facade niche, pushing its Synergy Facade into the commercial marketplace. Schuco has been producing solar facades for many years, but the Synergy Facade first hit the headlines in 1998 when it was specified for Studio E Architects' Solar Office at Doxford (see wa74 page 114).

Okalux (www.okalux.de) has a different approach to energy management. Its Okalux light diffusing and hermetically sealed glass incorporates a unique translucent capillary honeycomb structure within the cavity which can reduce a building's cooling load by up to 30%. Louvre fittings increase the system's effectiveness, as demonstrated by Pysall-Starrenberg & Partner's 500sqm Nord LB glazed biosphere dome in Braunschweig.

But the cladding innovation hasn't been entirely exclusive to Europe. American projects were conspicuous in the 2000 DuPont Benedictus Awards for innovation in laminated glass, sponsored by a German firm and historically favouring west-European entrants. Second place in the prestigious commercial sector went to Eric Owen Moss and California Glass Bending's (www.calglassbending. com) Umbrella. The dramatically undulating curved panes for the project's glass canopy have long been considered a technical impossibility.

It could be argued that the Umbrella isn't strictly a cladding achievement, but the significance of the breakthrough in glass manufacture will have repercussions in the industry. Each unique panel was formed by slumping two sheets of tempered glass over a steel mould, then laminating them with polyvinyl butrayal before using pressurised steam to bind them together. Many panels were broken in the trial-by-error production process, not least when the complex hanging brackets were wrongly aligned.

The canopy covers an amphitheatre, as part of a mixed use public project in the deprived California suburb of Culver City. It is defined by a 14-inch diameter steel pipe which terminates the vaulted bowstring roof. The result has seen Moss and his team labelled 'alchemists' in the press, perhaps for doing for glass what Frank Gehry did for titanium

Fougeron Architecture's 500sq m 440 Residence in Palo Alto, California took first place in Dupont's residential category. The project uses glass liberally to articulate the circulation spine, through laminated glass floors and a sandblasted glass bridge, both of which accentuate a spectacular glass-clad stair tower penetrating the building's skin. California manufacturer NGA Glass (www.nga.org) supplied the project.

First place in the student category also went to an American - Robbie Forslund's concept design for teaching buildings at Oklahoma State University included a cladding system comprising 120 individually operable glass panels.

Back in Germany, where new facade materials and ideas appear to have the best chance of seeing the light of day, UK engineer Buro Happold and Japanese architect Shigeru Ban were responsible for the cardboard-clad Japanese pavilion - the talk of the Hanover Expo (see wa85 page 40). The 35m clear

span structure is constructed from a core of paper tubes clad with lightweight paper and polymer coated polyester membranes.

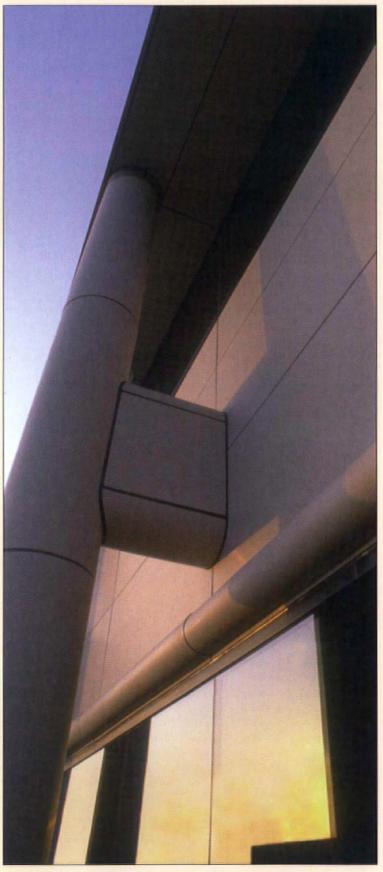
Japanese firms, more familiar with Ban's ideas on material sustainability than energy-obsessed Europeans, supplied the majority of the components. The TSP Taiyo-manufactured paper membrane (www.nittenkyo.ne.jp) required support on a 3m grid, and had to be lifted clear of Sonoco's paper tubes (www.sonoco.com) to avoid moisture being trapped against them. Timber ladders were introduced to generate a series of gutters and to provide a simple means of attaching the paper membrane.

The manufacturing process of the paper tubes is very simple - recycled paper is pulled out from a paper roll cassette, put into a jar filled with glue, rolled again in a spiral by a winder and cut into pieces of a designated length. The constituent parts of the paper system have yet to be sold as a package, but an off the peg paper system would be both cheap and lightweight, and have interesting implications for builders of fixed-life buildings.

Also at Hanover, Skyspan's (www.skyspan.com)

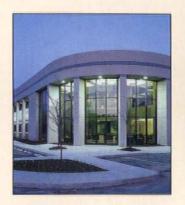
10 giant Hermes Umbrellas also pointed to the future in PTFE glass fabric cladding. A specially designed framework attachment connects fabric to a monocoque wooden grid, set at a height of 20m above the ground.

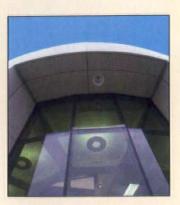
The connection technology, developed by Skyspan along with Thomas Herzog, breaks new ground, allowing vast areas of membrane to be erected with little visible support. wa



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ERCO Lighting Limited

www.erco.com provides a world of information for those involved in the decision-making processes in lighting design. The range of information on the ERCO website has developed into an extensive range of lighting knowledge and information about ERCO, its products and philosophy.

Prospective international customers who may be making their first contact with the company will find that erco.com provides an ideal opportunity to experience ERCO in its entirety. All the information which would be expected from one of the world's leading manufacturers is available here for lighting designers and users of light-calculation and simulation software.

http://www.erco.com

Delmatic Lighting Management

Delmatic's website illustrates the latest in advanced lighting management, and combines design information with case-studies of major international projects equipped with the latest flexible and inter-operable LonWorks environmental controls.

Systems offer total flexibility and liberate architects and designers from the rigidities of electrical installation, enabling lighting moods to be created, adapted and personalised from desk PCs and telephones and personal transmitters.

http://www.delmatic.co.uk

Wilkhahn GMBH

Wilkhahn develops design-oriented products and interior concepts for application in the high quality segments of contract furniture and for Airports (eg. Chek Lap Kok, Hong Kong) The German Marketing Prize, the German Ecology Prize and the participation in the world exhibition EXPO 2000, Germany, with the project "The future of work in the tense and exciting interplay of humankind, nature, technology and the market" underline Wilkhahn's endeavour to assume the role of a responsibleminded pioneer, which goes beyond the development of enduring prod-

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Ariostea Marmi

Ariostea Marmi has completely redesigned and expanded its website to provide visitors with an extensive menu, from complete catalogue of its flooring materials to the services offered to designers and customers. The new Ariostea Marmi brand shows the company's explicit evolution in the research and production of marble and natural stone.

In fact Ariostea Marmi maintain all the natural features of quarry marble, thus providing superior wear and chemical resistance.

http://www.ariostea.it









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Polar Blox, Inc. manufactures a polycarbonate snow guard that is U.V. protected. They carry four different models: Universal Guards, Minor Rib Guards which can be adhesive mounted or mechanically fastened; Slate and Shingle Guards which can be used for retrofit or new construction; and Standing Seam Guards which clamp on to the seam with no panel penetration or adhesives. These guards are available in clear and an array of colours.

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Naco's presence on the Internet since 1997 provides a general overview on its products which consists of adjustable louvre mechanisms for glass, wood and aluminium windows, as well as for external Sunbreaker Systems. As one of the leading producers of both product types, Naco Srl provides the best solution for air, sun and light control. New products are constantly being developed, such as the adjustable sunbreaker with perforated aluminium blades or custom shaped extruded profiles. For more information call

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ASSC provides advice for architects and planners about stainless steel and titanium material uses. ASSC offers matt, shiny and a "Sharkskin" non-reflective surface.

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Reggiani Group

The Reggiani site is not merely a facsimile of a printed catalogue, but rather is a wide portfolio of interior and exterior luminaires which can be examined in a variety of ways:by application, light source, IP rating, cut-out size and control gear type for example. There are full colour images of products and projects, text, technical and photometric data all available by simply clicking on to the images and going deeper and deeper into the information.

There are also quicktime movies providing information on particular products illustrating their many features and installation methods http://www.reggiani.net

Urban askforce

Tough questions are at the heart of this year's RIBA Conference, in Manchester 7 to 9 July.

When does high-density development become town cramming? How can the remodelling of industrial sites create the momentum for social renewal? How serious are we about sustainability? How can we avoid the mistakes of the past? Can architecture and planning ever be apolitical?

These key issues will be examined and debated by an international line-up of speakers at the conference, to be held at the Lowry, Salford Quays - itself an area which has undergone much urban regeneration in the last decade. The conference is being cohosted by Cambridge University's department of architecture and will offer delegates the chance both to debate urban theory and to explore the reality of rebuilding the city in the 21st century, with tours of Manchester's regeneration sites and new architectural landmarks.

Richard Rogers will give a keynote address on urban renaissance. Other speakers include Marco Goldschmied, RIBA President; Peter Carolin, head of architecture, University of Cambridge; and Michael Wilford, architect of the Lowry.

For bookings refer to the conference website: www.riba-conference. org.uk. Conference sponsors: ICI Dulux Trade, Bovis Lend Lease, Arup, Permasteelisa, the British Land Company, Steelcase Strafor, English Partnerships, RIBA Journal, World Architecture, Property Week and Building. It is organised by Wordsearch-for further information, contact Libby Sellers on 020 7549 5411.

Equal opportunity knocks

Architects for Change is the latest RIBA initiative to champion the rights of minority groups in education and employment

A united campaign to champion the rights of minority groups has been launched by a new RIBA equal opportunities alliance.

Architects For Change (AFC) has been set up as an umbrella organisation to support and advise members on issues of sexual, racial and disabled discrimination.

The forum aims to promote equal opportunities in the education and practice of architecture, both by supporting existing initiatives such as the Jane Drew Prize and liaison with the Construction Industry Council and other outside bodies, and through new publications and events.

Specific issues targeted by AFC for the coming year include:

- encouraging a more representative entry of women and minorities in architectural education
- recognising diversity in the education system
- researching reasons for, and reducing, the drop-out rate in education
- improving promotion opportunities and working conditions, including flexible working and improved pay.

News of the programme follows a number of initiatives this year by the RIBA to tackle equal opportunities, including participation in the Cabinet Office's Listen Up scheme to encourage work experience for young women, and the Building Opportunities scheme, offering vocational encouragement and practical training for deprived chidren.

Marco Goldschmied, RIBA
President said: 'Women, minorities
and people with disabilities are underrepresented in the profession and the
RIBA is determined to redress this
imbalance. Architects for Change will
provide a necessary vehicle to help
bring about changes and also to offer
support and advice. By taking part in
projects such as the Listen Up scheme
and the Building Opportunities
programme, we can ensure that there
are no discriminatory barriers to
studying architecture.'

AFC chair Sumita Sinha said the forum would act specifically, to help individual members with problems or queries, 'and generally, to ensure the RIBA remains aware of discrimination within the profession and takes steps to prevent it'. The group is pushing for a membership survey to test practices' willingness to implement equal opportunities policy at the workplace.

The forum includes representatives from the Women in Architecture group (formerly WAG), whose relaunch coincided with a resurgence of the debate about exploitation of women in product ads aimed at a design and construction audience. AFC is considering a campaign – 'Bin It' – to mobilise opposition.

Angela Brady, the new chair of WIA, said: 'Medicine and law used to be male-dominated professions. Now a female doctor or barrister is the norm, and the benefits to the clients and the profession are huge. Not so with architecture. We should be given more opportunity to participate at all levels in this business, bringing our special abilities in solving problems, multi-tasking and communication.

'Some women take a few months' maternity leave, but many take a career break for a year or more to start a family and find it difficult to resume where they left off.
Employers should be encouraged to offer job sharing schemes, or shorter hourly weeks. Larger firms should provide creches at work to redress this imbalance. There should be a tax free break for low income mothers to pay a child minder.'

AFC contacts

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Angela Brady, Women in Architecture chair, <bma@dircon.co.uk
Ayo Oluwale, student adviser ayo86@hotmail.com
Helen Taylor (Jane Drew Prize), helensiantaylor@hotmail.com
Wilfred Achille (racial equality), mode1@compuserve.com
Pamela Edwards (RIBA link) pamela.edwards@inst.riba.org
Virginia Newman (disability adviser) virginia.newman
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Hail, farewell

Tributes were paid to outgoing DG Alex Reid at a special members' evening at Portland Place. Praise for his work over six years as DG, most notably in the modernisation of the institute and the introduction of electronic services for members, w as led by past RIBA president Frank Duffy.

Dr Reid's efforts at making membership attractive have paid off: the number of RIBA corporate members qualified less than five years has gone up by 13% over the last year, and by 24% over four years to stand at nearly 2,500.

The new CE, Richard Hastilow CBE, will take up his post shortly. A former naval captain, Mr Hastilow has since 1996 been group managing director of Hampshire Training and Enterprise (TEC) and Business Link Hampshire.

Green bank

The RIBA has lent its support to Shooting the Future, a new databank of photographic images with a theme of sustainability. The database can be searched from www. shootingthefuture.co.uk, run by Envirostore, a comprehensive resource of advice, information sources, research and green products.

RIBA assistant director of practice Samantha McDonough said: 'We are looking for architects to contribute photographs in print, negative or digital form of anything from whole buildings to close-ups of insulation cross-sections or solar energy cells. Buildings illustrating their place in the community and hard and soft landscape will also be welcome.'

Ribanet Conference

Warning: tributary sewers can drain your building budget. In **Legal**, members have been exchanging notes on the high cost of securing permission to build over existing infrastructure.

'Look at the economics of putting a £15,000-20,000 kitchen extension on the back of a terrace house,' says one architect. 'Planning fee £90, building regs fee £60, party wall surveyors £1,200, sewer agreement £6,000, design £750. The cost before a spade goes in the ground is £8,000 – almost 50% of the cost of the extension.'

Other ancient hazards for contemporary practices include, theoretically, the risk of anthrax lurking in old plaster disturbed during improvement or conversion schemes. Postings to Conservation included one from an architect warning against too much caution: issuing plasterers with suit, mask and glove kit makes it impossible for them to work - they have no proper vision or sense of touch.

Els ewhere, CPD events include a Hopkins tour and an urban regeneration conference; in IT/CAD Minor Works for Mac, 3D Studio, Acrobat, ArchiCad and training for over-40s.

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Software is free to members. Email your member number, specifying PC or Mac, to ribanet@inst.riba.org

Web services expanded

The RIBA's electronic services – from Ribanet conference to www.architecture.com – have been streamlined and enhanced

A new phase in the development of Internet support for RIBA members has begun, with the integration of the institute's email conferencing system and website, and a new suite of free electronic services.

Ribanet Conference, the members-only forum for exchanging news, information and advice, is now accessible from the website at www.riba-electronic.com. Under the old system members needed special software in their computer to gain access; now users can log in from anywhere in the world with their password.

Head of electronic services John Edwards said the move would make it easier for existing users – 'wherever you are, if you can get on line you can get in' – and should encourage more RIBA members to sign up. There are currently 3,000 registered users.

The transfer to the web has also provided an opportunity to reorder the various subject folders. Ribanet Conference administrator Amy Chamier said several sub-conferences with low levels of traffic had been closed, and others have been merged: 'After three years of growth, we needed to prune back because many users, especially new ones, were finding it difficult to navigate, and were hitting some dead patches.'

Meanwhile, the RIBA is expanding the services available in Ribanet Passport, the section of electronic services which exploits economies of scale on the web. The latest deal secured is with discount procurers Buying Team (www.buy. co.uk). The partnership will allow RIBA members to save time and money by buying online through the Internet.

Prices are driven down by using the bulk-buying power of users; many of the site's products and services are offered at specially negotiated discounts for RIBA members, who will be able to access the service with a username and password. Print and stationery costs, for example, are 15% cheaper. Details of how to register will be available at www.riba-electronic.com.

The institute has also recently secured a bulk subscription

deal with Insight, the BRE's new construction industry email bulletin. Normally costing £300 a year, the service – which offers briefings on topics including productivity, regulations, construction law, best practice and sustainability – will now be free to corporate members.

Subscribers will have access to a searchable website containing archived material as well as receiving regular email bulletins. A preview of the new service can be found at www.askbre.co.uk/insight/intro.

Each monthly issue of *Insight* carries at least 25 new articles and an editorial article provided by a leading construction journalist on a major issue. A profiling service can send subscribers e-mails whenever an article contains a selected keyword. Details of how to register are available at www.riba-electronic.com.

Other Ribanet Passport services

- Estates Gazette Interactive. This is a news and information service on the UK property sector. It normally costs £400 per annum for an individual subscriber. It includes daily news updated during the day; every EGi news story since its launch in 1996; an archive of key content of Estates Gazette; and a searchable database of 27,000 property deals. RIBA corporate members who want free access to EGi should phone the EGi sales team on +44 207 411 2677 for a subscription form.
- EIU Viewswire. Produced by the Economist Intelligence Unit, EIU Viewswire normally costs £4,900 per annum for an individual subscriber. Each day it reports more than 100 key economic, political and market developments from around the word and analyses the implications for business. It also provides a constantly updated database of market data, forecasts, and regulations on developed and emerging markets. RIBA corporate members who want free access to EIU Viewswire should send an email to eiu@inst.riba.org giving their name and RIBA membership number.

World-class teaching

The search is now on to find the world's most inspirational teachers of architecture, following the launch of the RIBA's biennial Annie Spink Award.

The award will celebrate achievement in architectural education and is open to teachers working on any internationally recognised RIBA course. It will recognise excellence and the development of architectural education.

A prize of £10,000 is offered to the winner, who will be selected by a team of international architects and educators. It is financed by the Annie Spink Trust Fund, established in 1974 by Herbert Spink FRIBA, who bequeathed the trust as a lasting memorial to his wife Annie, who died in 1938, and conceived of it as an honour for the 'advancement of architectural education'.

The award is open to individuals or groups teaching full or part time on an RIBA recognised course in the UK or overseas. Submission from individuals or teams from architecture or other disciplines is welcomed. Candidates must be nominated by colleagues,

students, or former students of the candidate. Candidates must have made a substantial contribution to architectural education over at least a decade, and must be alive at the time of the nomination.

Further details and applications to: Miranda Housden, Annie Spink Award Co-ordinator, Centre for Architectural Education, RIBA, 66 Portland Place, London W1N 4AD, tel +44 (0)20 7307 3604, fax: +44 (0)20 7307 3754, e-mail: miranda.housden@inst.riba.org. Details on the award may also be found at www.architecture.com



Perhaps in this merging of the Olympic ideal with commercial sports architecture we are looking at the very fusion of sacred and profane that the founder of the modern Olympics sought so earnestly to prevent

Games lessons

The modern Olympic movement's dream of recreating the four-yearly contests of ancient Greece first came to fruition in Athens in 1896. At that time, there were no modern multi-purpose athletics stadiums so, as historians knew that for over a thousand years sporting events had been held at Olympia, the first modern games took place at the 331BC open-air Panathenian Stadium, restored by the Greek architect Anastasios Metaxes.

The pioneers of the Olympic movement had exalted ideals. Baron Coubertin, founder of the International Olympic Committee, aimed for a cultural reunification of art and sport in a spiritual setting, uncontaminated by politics or commerce. He was even of the opinion that there should be no spectators. Of the games that took place in Paris and Saint Louis in 1900 and 1904, both in conjunction with international exhibitions, he wrote: 'The games must be more dignified; more discreet; more in accordance with classic and artistic requirements; more intimate and, above all, less expensive.' Most of his wishes were destined to remain unfulfilled.

The two most important Olympic games of the first half of the 20th century took place in the 1930s: the Los Angeles games of 1932 and the Berlin games of 1936. The LA games featured the first Olympic Village and the largest stadium, the 100,000-seat Memorial Coliseum. In LA the attractions were spread over 100 square miles, whereas all the elements of the 1936 Berlin games were concentrated into a much smaller area, around a stadium with an infield sunk some 12m below ground level, hiding its great size.

The Berlin Olympics also foreshadowed future publicity. Not only was the entire games filmed and released as a full-length feature, but throughout the summer of 1936 the German dirigibles Graf Zeppelin and Hindenburg, with Olympic rings painted on their sides, carried the message of the games on passenger flights and flew over the stadium while the games were in progress.

Rome, in 1960, marked the beginning of huge investment in the games, but Tokyo in 1964, the first games ever to be held in Asia, showed how the architectural setting could be taken further still. The Olympic challenge was answered by a massive urban building programme. Japan spent US\$2 billion at 1960 values (US\$25 billion today) on the Tokyo games, including purpose-made Olympic buildings, new sports centres, new parks, new subway lines, new hotels, new commercial and residential buildings and a 50-mile network of elevated expressways with 22 off-ramps to ease access to the Olympic site.

Until 1976, apart from those linked to exhibitions, all the modern Olympics had been paid for by governments. Even the Munich games of 1972 cost US\$600 million (US\$3.8 billion today). But Montreal mayor Jean Drapeau was convinced that the games could pay for themselves. With a budget of just over US\$300 million he pledged the city of Montreal would repay the Canadian government if the games lost money. Unfortunately when the 1976 games began, over US\$800 million had already been spent. The final cost of the buildings alone was in excess of US\$6 billion (at 1998 values).

It took Atlanta in 1996 to make the mirage of the 'self-financing games' a reality. The trick was to merge amateur and professional sport; in effect to commoditise the Olympic building process, by having an 85,000-seat Olympic stadium that could be cut in half to leave a 48,000 seat baseball park after the games were over. Perhaps in this merging of the Olympic ideal with commercial sports architecture we are looking at the very fusion of sacred and profane that the founder of the modern Olympics sought so earnestly to prevent. Only Sydney can tell us.

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