

# THE ARCHITECTURAL REVIEW



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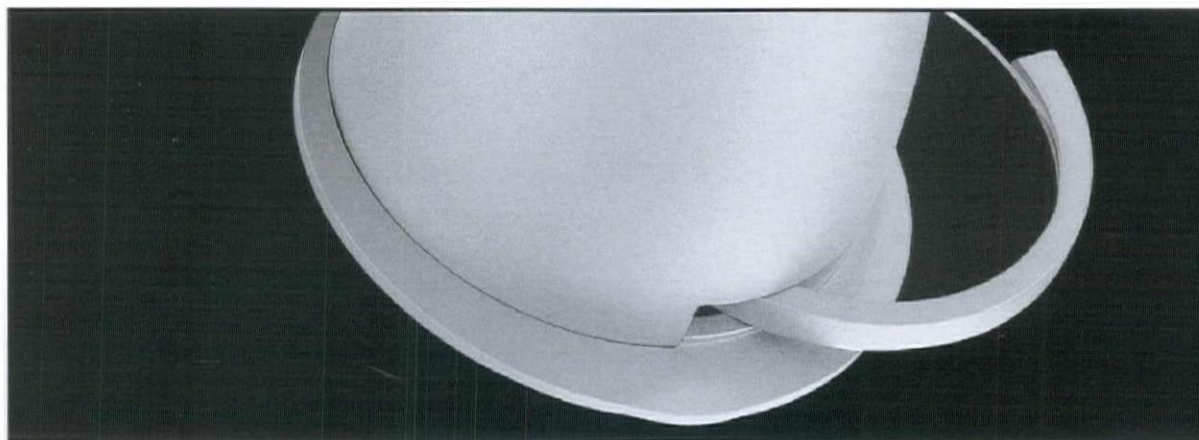
## PLACE OF WORK

Hopkins' parliamentary offices Piano in Sydney Rogers in the City





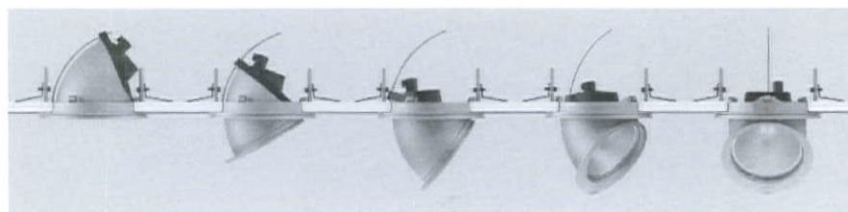
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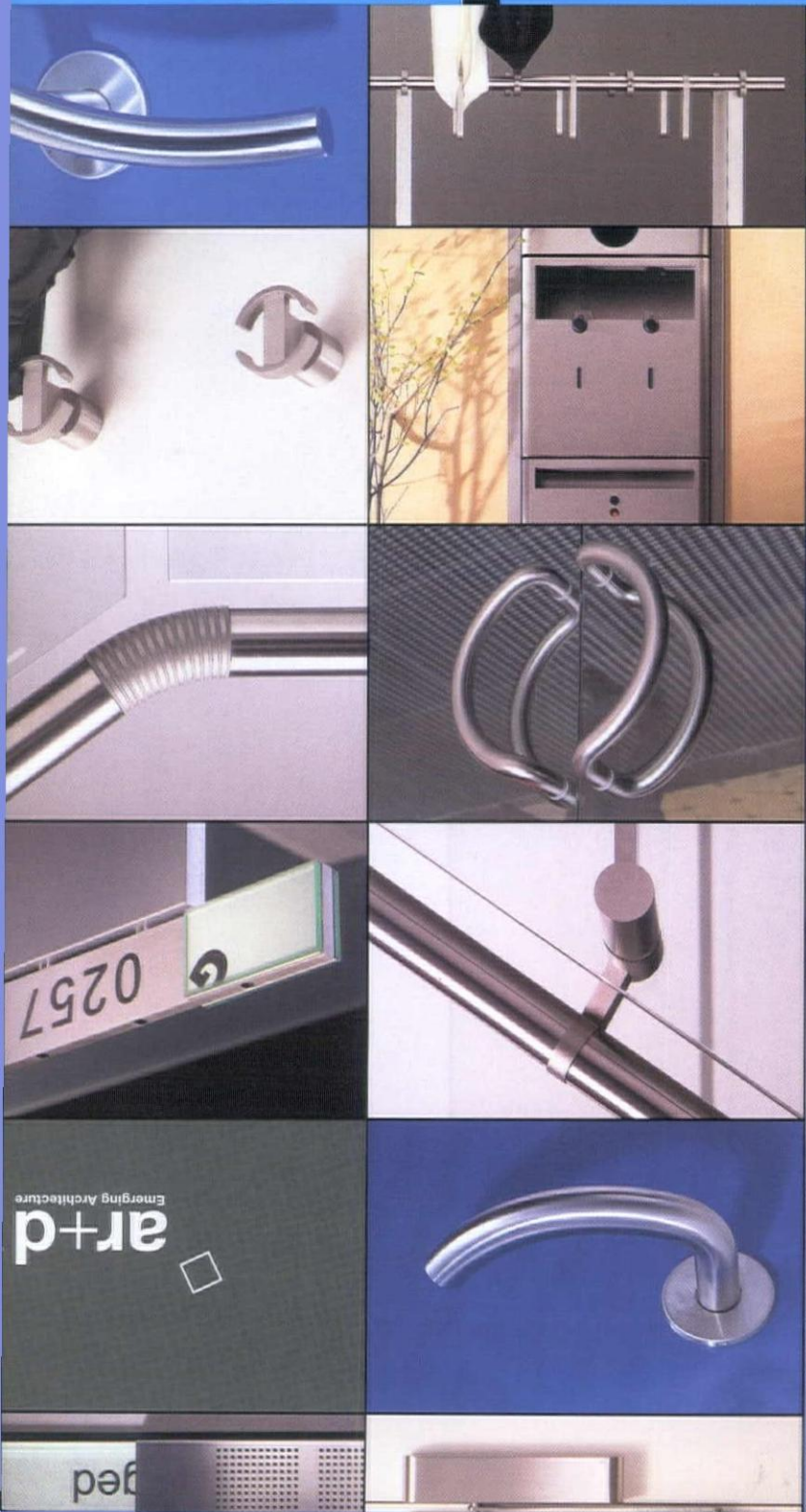
**Bathroom**

**Washroom**

**Handrail**

**Wardrobe**

**Signs**



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Emerging Architecture

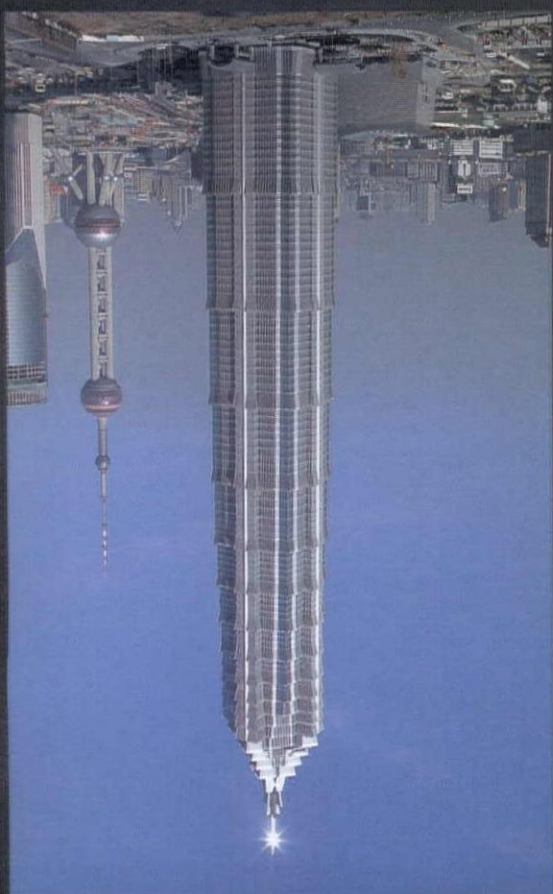
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# Highest Quality

## Choosing Quality to Suit China's No. 1 Building

Already being called a symbol of China, the tallest skyscraper in China required the highest quality elevators. The trip to the 88th floor takes just 45 seconds. The building has quickly become a popular Shanghai tourist spot, with 2 million visitors so far, and on busy days 14,000 passengers enjoy its 9-meters-per-second speed. Mitsubishi Elevator was chosen for its advanced technology, including VVVF control and high-precision rail guides, etc. In two years of full operation, there's not been a single problem. Passengers on the scenic elevators express their surprise at the smoothness and shortness of the ride. On one occasion, our staff accidentally pressed the emergency stop button during a guided tour. The guide kept talking and the ride resumed so smoothly and instantly that the other passengers never even noticed the interruption. We rate Mitsubishi's reliability, prompt maintenance, and unique "total quality" very highly, and believe that we made the right choice.



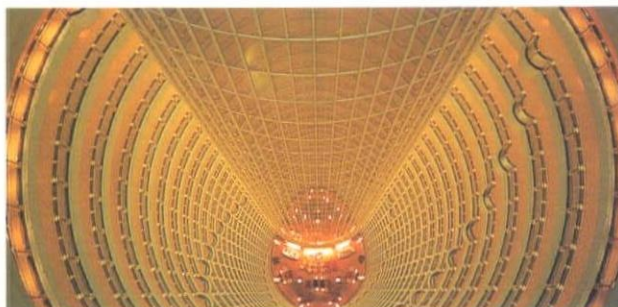


# An Impressive Landmark for Shanghai

With 88 floors above ground and 3 basement floors, at 420.5 meters the Jin Mao Tower is the tallest building in Shanghai and in China. Located on the eastern seaboard, the building incorporates offices, a shopping mall, a hotel, and an 88th-floor observation deck, and as such it is a symbol of Shanghai Prefecture's policy of reform and one of Asia's greatest buildings for the new century.



Escalators in the shopping mall.

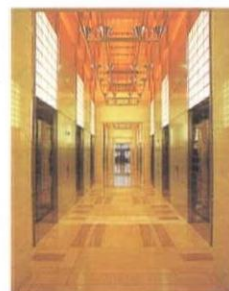


The elevator well seen from the 88th floor Sky Lobby.



High-speed panoramic view elevator.

The Jin Mao Tower elevators incorporate Mitsubishi's pioneering technology to ensure speed, safety and comfort. The streamlined, aerodynamic elevator transports 33 people to the 88th-floor Sky Lobby in just 45 seconds. VVVF motor control delivers smooth motion with little horizontal vibration; the high-precision elevator rail guide boasts a margin of error of just 1/100mm; and the PM gearless motor ensures a smooth and steady ride on low-power specifications. Assuring safety, automatic ride sensors monitor special conditions such as high winds, earthquake and fire. Auto docking allows elevator cars to "dock" side by side so that passengers can transfer to another car in an emergency.



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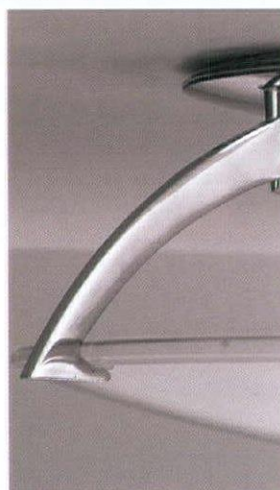
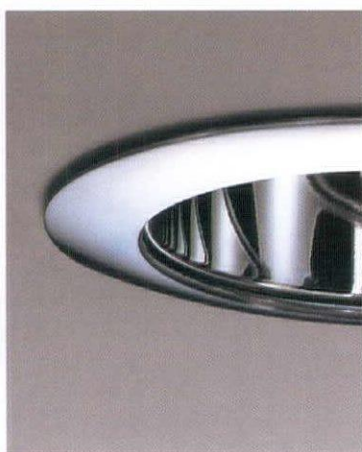
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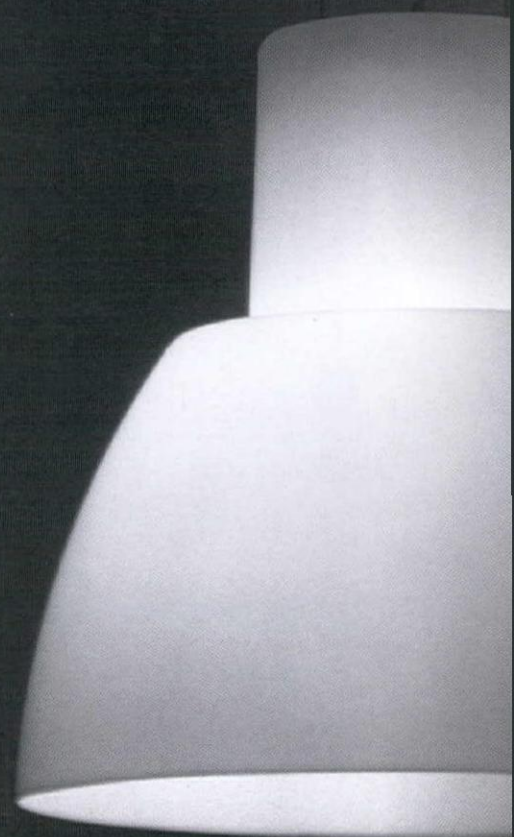


# Reggiani and Álvaro Siza



*Álvaro Siza: Lorosae, dawn light.*  
This simple but unique lamp by the great Portuguese architect Álvaro Siza first saw its own light in Vicenza towards the end of 1999 in the large hall of Andrea Palladio's Basilica. Siza conceived it to shed light on what counts the most for him: his architectural works. Now its clear beauty – stripped of redundancy, paraphrasing, or a rhetorical mantle – reappears here, complete, and in a large and a small version to better meet the needs of those who have a preference for it.

*Álvaro Siza: Lorosae, luce d'albore.*  
Questa semplice ma impensata lampada del grande architetto portoghese Álvaro Siza ha visto per la prima volta la propria luce a Vicenza, verso la fine del '99, nella sala grande della Basilica di Andrea Palladio. Siza l'ha voluta per fare luce su ciò a cui tiene di più: le sue opere architettoniche. Ora la sua evidente bellezza – senza ridondanza, senza parafrasi, senza rivestimento retorico – riappare qui, ultimata, nelle versioni grande e piccola, in modo da avvicinarsi a chiunque la prediliga.







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Italy. Palladian Basilica.



*Álvaro Joaquim Melo Siza Vieira was born in Matosinhos, Portugal, in 1933. From 1949-55 he studied at the School of Architecture, University of Porto (ESBAP). The first of his projects to be built was finished in 1954. From 1955-58 he collaborated with the architect Fernando Távora. In 1976 he was appointed Professor of Construction at ESBAP. He has been Visiting Professor in Lausanne, Bogotá and Harvard. He lives in Porto.*

*Álvaro Joaquim Melo Siza Vieira nasce a Matosinhos, Portogallo, nel 1933. Studia alla Scuola di Architettura dell'Università di Porto (ESBAP) tra il 1949 e il 1955. Porta a termine il suo primo progetto nel 1954. Tra il 1955 e il 1958 collabora con l'architetto Fernando Távora. Nel 1976 diventa professore di Costruzione alla ESBAP di Porto. È stato visiting professor a Losanna, Bogotá e Harvard. Vive a Porto.*



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# UNIFOR

Work environments  
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Electronic Arts  
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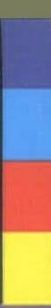
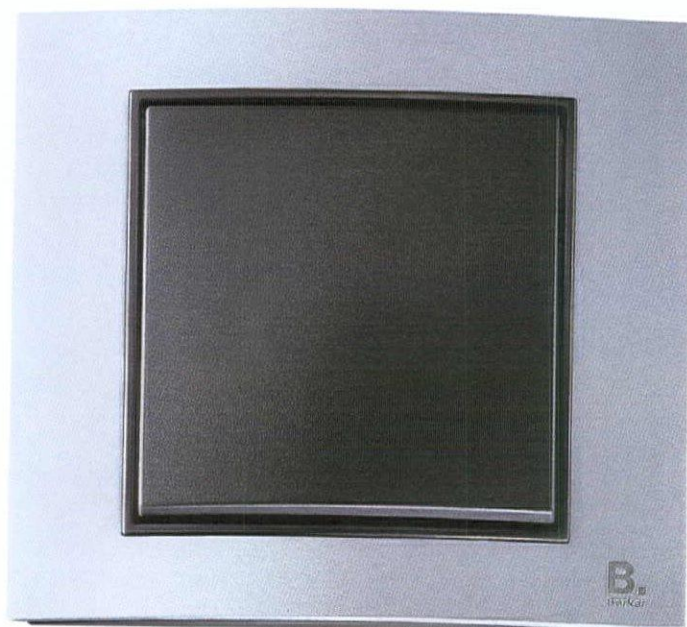


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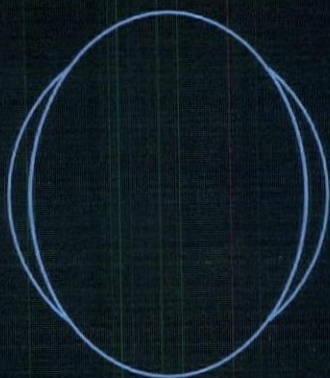


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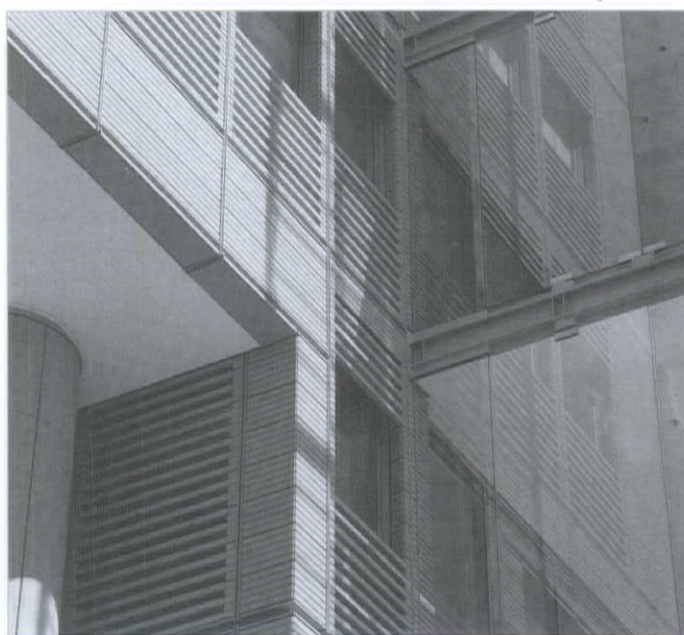
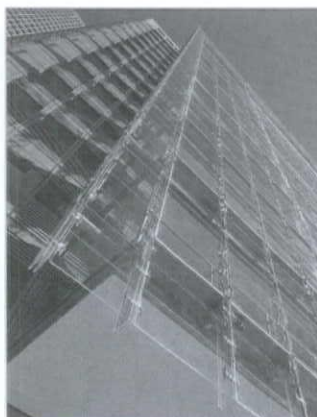


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Sydney, Phillip Street, Architect: Renzo Piano



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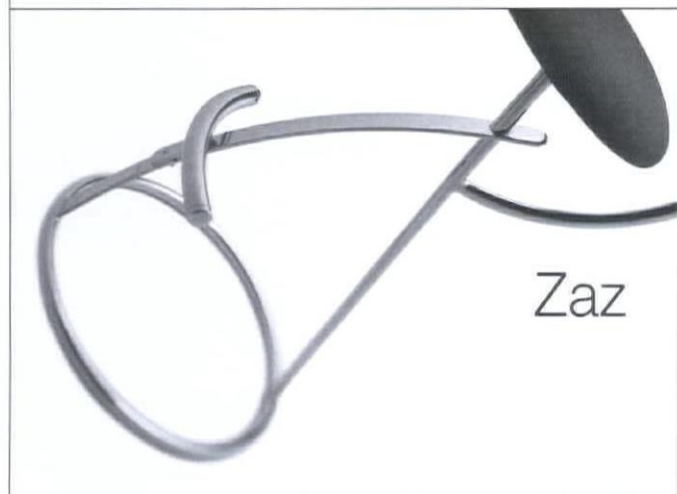
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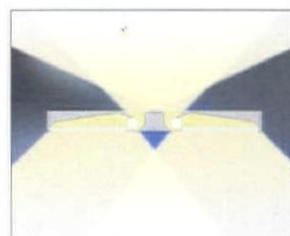
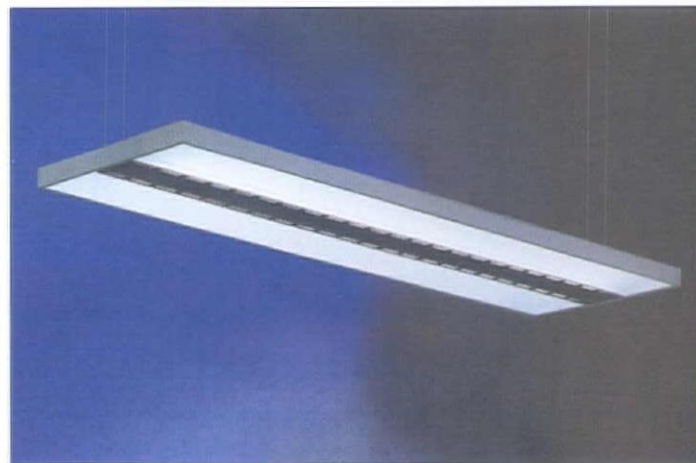
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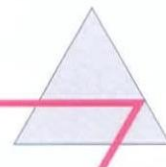
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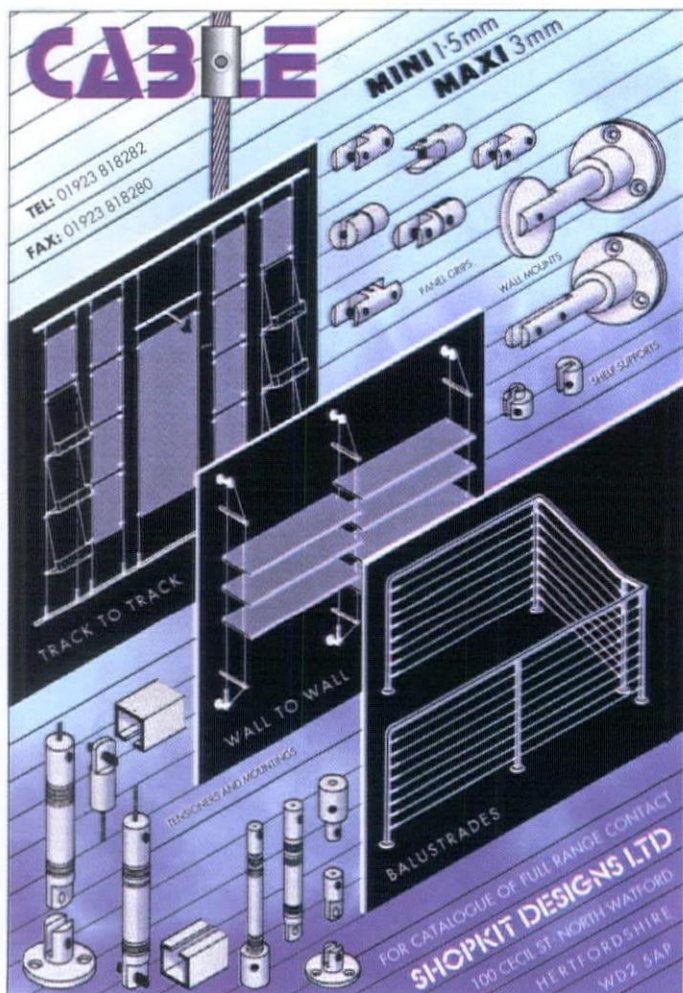


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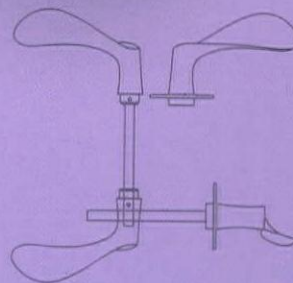
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## MADE IN SWITZERLAND

**An exhibition of Swiss Design has opened at the Museum of Applied Arts in Cologne.**

What is Swiss? Toblerone, the Swiss army knife (Karl Elsener, 1897), Univers typeface (Adrian Frutiger, 1954), Max Bill's graphics, USM Haller (1963) system furniture? Cologne's Applied Arts Museum has an 11-year tradition of coupling events with the annual Furniture Fair. Over 200 Swiss-made contemporary design objects, furniture, industrial design, graphics, textiles and jewellery, were selected with the help of Zürich's Design School and the Swiss magazine *Hochparterre*. Roland Eberle, who exhibits his school furniture system Scuola Box and lamps, also designed the exhibition with a white glowing pneumatic snake as continuously running display shelf and backdrop.

The game of nationality labelling has increased in proportion to the creeping threat of globalized markets. As described in the accompanying catalogue, when asked if there was such a thing as a regional signature, Swiss designers (gathered in Lausanne) were either offended, suspicious as to where the question was leading, or claimed to follow their own individual approaches. In a small landlocked nation, did they fear being geographically defined, put down as provincial?

In contrast other essayists, architects, historians and critics, have no trouble in defining Swiss characteristics: meticulous workmanship, aesthetic refinement, ideas carried through with regard for their consequences, appropriate materials engineered down to the smallest detail. Such qualities are apparent over time, from Rudolf Lehn's do-it-yourself picture frames (1976), Willy Guhl's garden chair made by Eternit (1954), or Hans Coray's Landi chair, holed like Swiss cheese, for Switzerland's 1938 national fair, to contemporary furniture by Hannes Wettstein or Urs and Carmen Greutmann. All are products of a rich, industrialized, Western country, with a moral abhorrence (inversely proportional to its collective bank balance) of displaying wealth through superfluous ornamentation.

Are definitions so easy? As an outsider Hans-Peter Schwarz, Rector of Zürich's Design and Art School, previously at Frankfurt's Architecture Museum and Karlsruhe's Media Centre, points out the difference between *Gestalt* and design. In the German language *Gestalt* is the thorough analysis of a problem, as opposed to the more superficial design. Design can be fashion but *Gestalt* is for ever. Swiss designers also



A glowing white pneumatic snake formed the backdrop to the Swiss Design exhibition in Cologne.

labour under the dichotomy of being exhorted to 'cross borders', to break out of their small alpine landscape, and simultaneously be aware of identity (not necessarily national). Design may move on, but the Swiss still retain their thorough education system and subsequent inexhaustible enthusiasm in the search for appropriate design solutions, which will see them in good stead for the next century. LAYLA DAWSON

*Swissmade – Contemporary Design from Switzerland, at Cologne Museum of Applied Art until 16 April. Catalogue published by Hochparterre, Zürich 2001, DM 40. [www.museenkoeln.de/mak/](http://www.museenkoeln.de/mak/)*

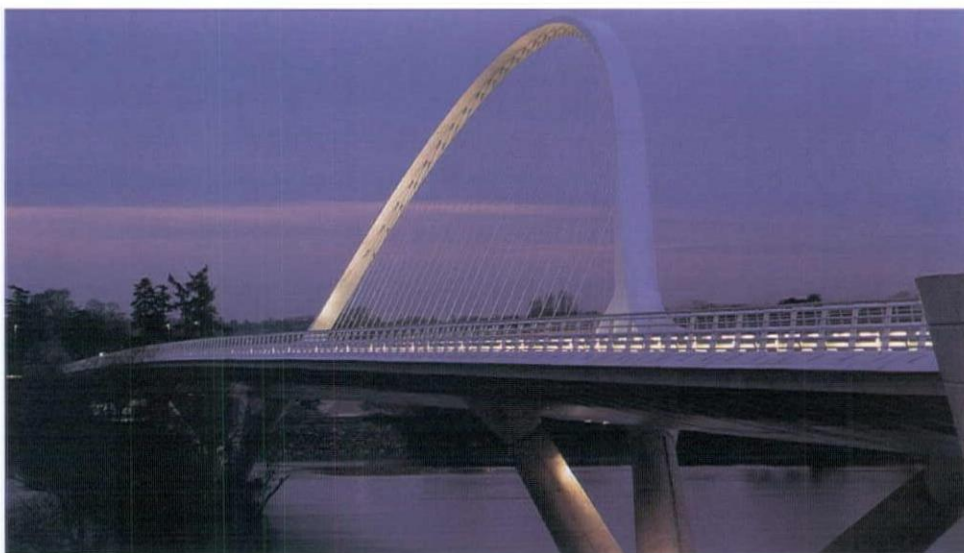
## CALATRAVA'S CREATIVITY

For a historic cultural moment, Florence turned out to be the perfect city to host the first comprehensive exhibition of the architecture of Santiago Calatrava. To begin with, for those arriving by train, there is a splendid view from the end of the platform of a lone late-Futurist building, the power plant in reddish brown concrete and brick designed in 1932 by Angiolo Mazzoni. Remarking on its four tall smokestacks

enmeshed in a steel superstructure of catwalks and an open spiral stairway, the critic Herbert Muschamp quite properly calls this building 'a proud proclamation of faith in the power of industrial technology'.

Add to this the setting for the exhibit *Santiago Calatrava: Artist, Architect, Engineer* – the fifteenth-century Palazzo Strozzi, a massive Renaissance structure that recalled for the Zurich-based architect some of the buildings of his native Valencia, where he found early inspiration. In particular, he speaks of a sixteenth-century Gothic-style palace called La Lonja, where a market of agricultural produce was installed under spiralling stone columns supporting high vaults. The Strozzi's *cortile* and ample rooms with high windows were ideal for Calatrava's sculpture and the architectural models that required long views to appreciate how these airy linear constructions – railway stations, airports, stadiums, concert halls and museums – would be perceived in the landscape.

And finally, there is the spirit of Michelangelo. In the show's opening words, 'Florence presents the memory of the time when the arts were not dispersed, [and] artists worked in all media offered by art and technology'. As Michelangelo's ideas took root in sculpture, so the analogy goes, Calatrava's formal experimentation and structural formulae were also born in sculptures. In truth, he first wields a paintbrush with the apparent ease of a Chinese scholar-painter and then translates these images into sculptures that end up as soaring, tautly strung bridges or sheltering trusses. Calatrava's doctorate in engineering (on the foldability of space frames) provides the key to the realization of his imagined architectural forms. One is reminded



Pont de l'Europe, Orleans by Santiago Calatrava: the brow raised. (Photograph: Paul Raftery.)



that in the 1840s it took a construction engineer from Dublin like Richard Turner to make the breakthrough in designing the lacy Palm House at the Royal Botanic Gardens, Kew, though Decimus Burton signed the drawings.

The purpose of the show was to establish Calatrava's important link as an artist, mainly as a sculptor whose works echo revolutionary aspects of Brancusi's polished forms as well as of Naum Gabo's experiments with torsion and tension. But the overriding theme served to elucidate his orientation to engineering principles based on human and animal anatomy.

Among his multiple watercolours of Rodin-esque human figures and Picassoesque bulls is a startling image of an eye, usually blue, under a heavy brow, with a piercing gaze. In merging this idealized eye with another image, of a bird in flight, he produced a sculpture in polished brass, *The Bird*, from which he derives one of his major architectural silhouettes.

Like the sculpture itself, seen from the side, the arch of the steel brow overreaching the models (and eventually the buildings themselves) appears like a protective carapace over the complexity of interior trusswork. Seen straight on, the arch separates into a winged V formation that conveys both the tension and levity of frozen flight. The iris of the eye, conveyed in the sculpture by a brass ball that rolls back and forth on the polished black granite base, can also be seen as the inner sphere, say, of the planetarium revealed behind a grid wall that opens and closes like an eyelid. If as Calatrava believes, the eye is the architect's most accurate tool, then the gaze is reciprocal, with the building configured as a seeing organism.

Inside the buildings, slender supporting columns under canopies of steel tubing recover for him the primeval notion of sheltering trees, and a full-scale mockup in the *cortile* gives the impression of a delicate forest. He has brought movement to architecture with his electronically controlled openings, like the glass clamshell that parts at street level to swallow up visitors into the whalelike interior of the underground Emergency Services Centre in St Gallen, Switzerland.

The symmetry of the buildings was often expressed by half models reflected as whole in mirrored backgrounds that completed the razor sharp images. But nowhere were mirrors more effective than in the gallery of bridges, where each of the 16 models in white tubing appeared to float above its double reflected in a river of mirrors. It is difficult to travel around Europe, especially in Spain, without crossing a Calatrava bridge, and almost every major city has had one proposed if not constructed. If in Japanese cul-



## outrage

**Gunnar Asplund's Skandia Cinema in Stockholm is one of the first and finest examples of the building type ever made. It may be destroyed.**

It bridges the journey from theatre to cinema, from Classicism to proto-Modernity, from functionality to myth making. On entering, you go down a flight of stairs to the foyer whose walls were originally dark green. As Simo Paavilainen says, 'In the middle of the greenness stands a brightly-lit white walled building with cornices and red velvet doorways – a white building in a deep green space. The visitor believes that he is entering a building, but inside he finds a moon and a deep blue arch of sky'. The celestial globes which used to hang in the auditorium have long been removed (but, like most other disassembled parts of the original design, they have been carefully stored).

Care seems to have run out. The owners are desperate to get more rent from their investment in valuable central Stockholm. They would like to transform the Skandia into shops and restaurants. It closed as a cinema last summer. And it is now dark, dank and empty. In Swedish law, the owner has to agree that a property should be put on the national list of protected buildings. The proprietors are determinedly against the idea.

It is time for the Swedish government to step in. As Kjell Furberg (who is heading the campaign to resurrect the cinema) says, 'the Ministry of Culture should take over the building to make it an international cinema centre. It should be as important as Drottningholm' [the wonderfully preserved eighteenth-century court theatre]. To support the campaign to save the Skandia, get in touch with Furberg at [furberg@algonet.se](mailto:furberg@algonet.se), or Karin Winter at the Stockholm Architectural Museum: [karin.winter@arkitekturmuseet.se](mailto:karin.winter@arkitekturmuseet.se). International protest is urgently needed to shake the government into action. P.D.

ture the bridge is symbolic of the time it takes to cross from one place to another, for Calatrava, the bridge becomes a destination in itself, a link that is also a gathering place.

Three new structures are just recently completed – the Science Museum in the Valencia complex, the airport terminal in Bilbao and the Europe Bridge over the Loire at Orléans – and the exhibition ended with a glimpse of the future, a series of watercolour sketches of the

proposed Cathedral of Christ the Light in Oakland, California, replacing a church destroyed as a result of the 1989 earthquake. Although Calatrava's tree-filled bio-shelter for the roof of St John the Divine in Manhattan has never been realized, the Oakland cathedral will also reach skyward as a pair of hands closing in prayer. For all the appearance of industrial technology, Calatrava strives to achieve beauty through organic order. PAULA DEITZ



# Look. No feet.

Despite appearances, our new minimalist cubicle, Oasis, does have feet. It's just that they are not visible from the front elevation.

So you are left to admire the clean, spare, uncluttered lines. And to marvel at the easy maintenance.

The same ingenuity and good sense have gone into the design of the door.

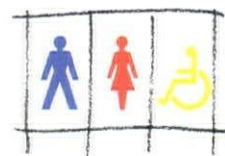
We've suspended it from the headrail to create what appears to be a floating cubicle. It's not only more attractive, it works more efficiently.

In every detail, Oasis' cat-walk looks are matched by a steely determination to withstand rough treatment and reduce maintenance.

Brackets, through fixings, door lock and adjustable feet are all made from stainless steel.

The system is already working beautifully in the new £42 million Bridgewater Hall in Manchester.

With Oasis, there's less to see but more to admire.



**Oasis by Thrislington Cubicles.**

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## obituary

DENYS LASDUN 1914-2001

**Trevor Dannatt writes a personal memoir of Denys Lasdun, the Grand Old Man of English architecture, who died last month.**

We exchanged Christmas cards for years, met at gatherings from the Mars Group to the Royal Academy of Arts, gossiped and talked seriously about issues we both cared for. These occasions were a source of pleasure and for me often brought a renewal of commitment. Once by chance meeting in Tuscany, characteristically DL enthused about the Benedictine Abbey Church of S'Antimo, and demanded we visit, which we did and were rewarded. Similarly he insisted one should read Panofsky's *Gothic Architecture and Scholasticism*. The historical dimension of architecture was a potent generator for him evidenced in his lifelong interest in the architecture of Hawksmoor 'so singular and so profoundly concerned with the roots of architecture and the nature of space'.

There was so much to admire in the man and the buildings. Admiration was reinforced on a recent valedictory tour of his London buildings, especially in the core space, the central circulation of the Royal College of Physicians, a building esteemed and loved by all – especially the President of the RCP at the time of its making, 'Bill' Hoffenberg, who paid immense personal tribute to DL. He must have been a good client as its consonance seems to indicate and DL's return years later to build an extension is a credit to client and architect relationship.

There is an architectural density in that generative central space of great potency, a similar density in the core space of the National Theatre, and surprisingly in the Claredale Street housing where at the confluence of access galleries there is an extraordinary poetry of space and material with slots of view extending into the city – designed as social housing, at risk for a while, and saved by the efforts of DOCOMOMO, the Twentieth Century Society and English Heritage: admirably restored by Lincoln Holdings as Keeling House. Not so far away at Usk Street there are two earlier examples of this pattern and these 'cluster blocks' exemplify the search for new housing patterns with which Lasdun was much engaged in CIAM and MARS and the TEAM X dialogues to which Lasdun made considerable personal contribution.

After leaving the Architectural Association school, Lasdun worked for a period for Wells Coates (DL's 'temporary artistic mentor') on Palace Gate (the 3:2 section), and he joined the Tecton practice led by Lubetkin in 1938. William Curtis quotes Lasdun as saying of Tecton, 'Here I found a professionalism, a classical attention to detail and a continuity of attitude to concrete which had its roots in the work of Auguste Perret.' The Lasdun Lubetkin relationship is an engaging area for speculation. No man is an island and Lubetkin by all accounts was a powerful influence on the Tecton members much younger, much less experienced. Lasdun, some 13 years junior, must have recognized in Lubetkin an authority that was based on clear principles and critical awareness, qualities that he also embraced.

Lubetkin was a very strong character and Lasdun equally so. Two close friends of mine were partners and both have spoken of the authority which DL possessed. Only such authority could have achieved projects like the National Theatre, and the European Investment Bank building. Behind that authority was the powerful discipline of a committed and loyal office. Graham Lane has said there was a constant questioning of aims and achievements and DL was certain 'true architectural art could only be achieved by struggle'. There was debate and fierce argument and in reality there was nothing so simple as the common practice of producing a valid sketch design and then working it up.

Lasdun saw every building as a piece of true research intensively conducted at every stage. From John Allen it is clear that the Lasdun method was close to that established by Tecton. Lane speaks of five distinct stages in which Lasdun participated to a greater or lesser extent. The study of all those facts which impinge on a building project objectively and subjectively. The stages not dissimilar to those that are current ideals of practice, but more intensive and always with critical assessment of design alternatives. The objective was to find the *genius loci* of a place and in Lasdun's words 'the soul of the building'. At some stage all the main elements of the building were put into model form. From this emerged a clarification of the concept and its development in greater detail, so that functional and architectural needs were reconciled and the language of the building was completely coherent and expressive of content, the elements of space, structure and form brought into harmonious relationship: the search for a certain inevitability at every scale. Only then the detailed model for



Denys Lasdun with his model of the National Theatre.

presentation, and then the production information and construction.

Excepting Luxembourg and Norwich, London has enough building by Lasdun to satisfy any architectural enthusiast. From Bethnal Green, Bloomsbury, South Bank, St James's Park, Regent's Park to Paddington with the Hallfield Estate, and its lively coda Hallfield School (diminished somewhat by adjacent educational accretions) and in Newton Road the 1937 House, sadly now rather down at heel. I remember its pristine freshness (well captured in AR March 1939), its sophisticated character and much more considered construction than most houses of that period. And this by an architect in his early twenties! It was job number two out of some 30 realized projects, five listed in London alone, apart from a range of outstanding competition entries. It seems fitting that his last work should also be domestic, the major extension of his earlier Hill House in Berkshire, as yet unpublished.

Although my lazy predilections are for a looser sort of architecture, especially in the domestic field, I cannot but hold my breath in awe of his achievements, his singleness of purpose, the outstanding ability to extract a formal architectural order out of so many diverse building tasks and heighten it to the level of eloquent dominance, as is so evident at the National Theatre. A timeless architectural language exemplified in Corbusier's magical sentence '*Le jeu, savant, correct et magnifique des volumes sous la lumière*'.

For me, from days of awe I moved on to days of deep personal respect and affection for a great architect and a most lovable man.

*Et lux eterna luceat eis.*

TREVOR DANNATT



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## LAMMHULTS

## view

### letters

#### RICH AND POOR

SIR: One thing that makes any sensible person lose his rag is the sound of a well-heeled liberal whining about the 'ecological crisis' caused by his own extravagant life-style (Leader, January issue). When, Sir, are you going to give up your company limo (I presume you have one). When are you going to stop over-heating your house? When are you going to accept that the difference between the rich and the poor of this world is not just quantitative, but also qualitative?

Architects can do little to ameliorate the condition of the poor. Architecture is for the richer people of the world. Look at any shanty town, here, in Asia or South America and you will see that all the precepts that we are brought up with: proportion, aspect, constructive integrity, and so on are complete rubbish. And dangerous rubbish at that, for they tend to prevent us from looking at the real problems, and however ineffectually, trying to help solve them.

What's needed is a much more radical and holistic approach to the plight of the poor (and the world in general). When are we going to get pollution free transport? When cheap and easily assembled building materials with high insulative properties? When, decent city planning which will reduce the need for massive numbers of polluting and destructive journeys? Architects can help a little in all such areas, but only if they forget their prima-donna role and learn from the poor, who can be (far from always) remarkably ingenious and inventive with the slender resources they can command.

All professions, as Bernard Shaw remarked, are conspiracies against the layman. Ours seems more conspiratorial than most, and determined to make its potentially beneficial knowledge accessible only to the rich.

Yours etc  
S.E.AARONSEN  
Johannesburg  
South Africa.

#### OPEN AND SHUT CASE

SIR: Upon reading the December 2000 issue of your publication, I felt compelled to write about an issue that I've been concerned about for some time. The 'Open and Shut Case' article (p58) shows a beautiful, shuttered wood wall on a student hostel in Portugal. Like so many other projects that you feature with these gorgeous

exterior wood walls, screens, etc, this one caught my eye but also begged the Big Question: How well will these projects weather over time? I would love to see a picture of this project in even five years and see how it looks. Any warping? Streaking? Delaminating? It's not the sort of aesthetic that would seem to anticipate an uneven patina or significant imperfections. The hardwood slats on the Australian house (p50) stand a better chance over time if the end connections don't split.

Would it be possible to have a critical evaluation of external wood applications over time? As much as I truly admire the Architectural Review, more post-occupancy performance evaluations and general questioning would be welcome.

Yours etc  
SCOTT J. NEWLAND  
Minneapolis, USA

### index

The January to December 2000 indexes are now available. To receive them please email [lynne.jackson@ebc.emap.com](mailto:lynne.jackson@ebc.emap.com). Readers who have requested an index will automatically be sent the new ones and new enquirers will be put on our mailing list. Or you can print it out from the information category of our website at: [www.arplus.com/info/info.htm](http://www.arplus.com/info/info.htm)

### erratum

The Bakery in Colombo, Sri Lanka (below) published in AR December p80, was in fact designed by Madhura Prematilleke. We apologise for the wrong attribution.







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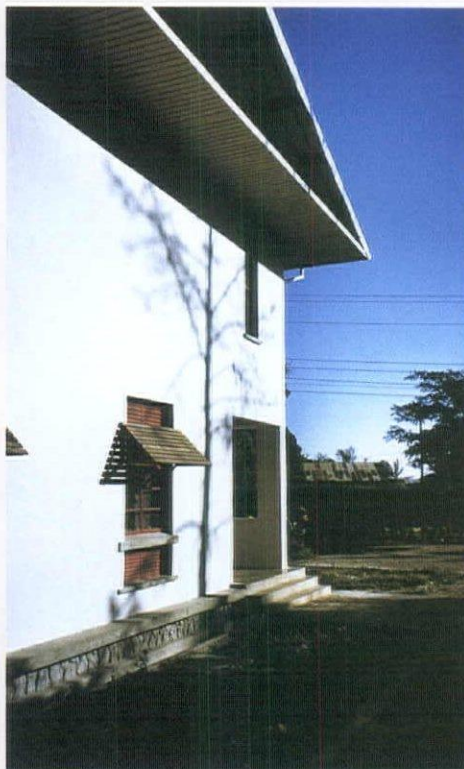




Campus-like setting for a school for deaf children in Tabora, by Belinda van Buiten and Antoni Folkers.



Some of the school's enthusiastic users.



School for the Deaf is characterized by formal economy.

## Letter from Tabora

**Working in Africa challenges conventional Western views of architecture, as this Dutch partnership discovered through their recent experiences in Tanzania.**

Lost in the midst of the endless East African savannah, the Tanzanian town of Tabora is a hot and dusty outpost. But in the late nineteenth century it was an important city, a thriving caravanserai and meeting place for the Arab slave and ivory traders, hungry white explorers and missionaries, the Wasukuma and the Wanyamwezi with their king Fundi Kira. Little is left of all this – luckily perhaps – and what became of the slavers, the chiefs and the explorers is known. But what became of the missionaries and what of Tabora?

Missionaries and whites in general are currently being kicked out of Africa. Mixed feelings about this aside, they offered help to a forgotten population: the millions living in the savannah, millions of people not yet discovered by the politicians in the capitals. What will the consequences be of the missionaries' disappearance? Who will take over their role as hard working and dedicated professionals, assisting the population in building up economic services? And in the architectural profession, who will design and coordinate buildings of quality? African architects and engineers are not yet responding to this challenge; they are too busy discovering the sweetnesses of liberty, money and power, and still euphoric to have escaped from the savannah.

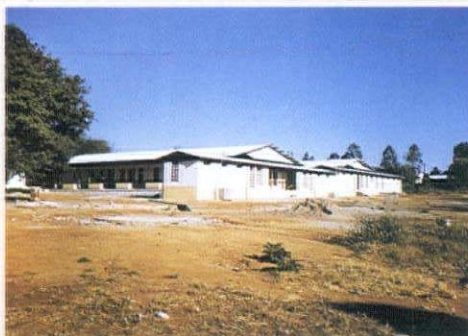
Stripped to its essence, quality is good durable shelter against the often oppressive climate, built for little means and yet expected to

last for generations as there will be no resources for care and maintenance. Understanding and realizing these basic objectives still makes practising architecture in Africa very appealing. There is no need to belong to the avant-garde, no necessity for buildings to make statements or dictate fashion. Just the imperative to build shelters that will be durable, convenient and beautiful, nothing else.

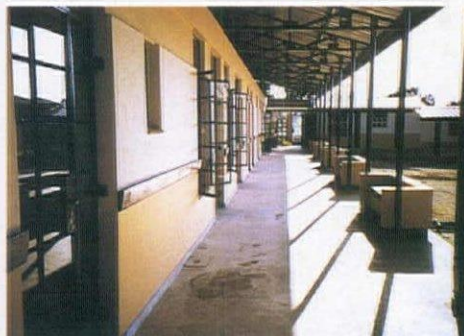
Since arriving in the mid-1980s, working in Africa has been a great adventure, we have experienced its expanse, vitality and mystery – qualities almost lost in Europe and the West. We initially came as idealists seeking adventure, and as students started helping to upgrade squatter settlements and to build with mud in Ouagadougou in 1984. Later we established two offices there, and although still firmly based in the Netherlands, we are involved in projects in Africa. Despite the harsh circumstances and difficulties of working in such an environment, we cherish our experience and it has become an indissoluble part of us. The lack of money, lack of knowledge, harsh climate and other exotic factors have in turn thwarted and inspired our work, and changed our view about what is important and what is futile in our profession. Simplicity – the 'natural' handling of materials and technology, modest but outstanding – seems the key to good building. We have christened this 'discretio'.

It is true that Westerners can be blamed for enforcing 'our' architecture and destroying the local 'primitive' building culture. So how can we re-establish traditional architecture? After we taught the Africans to build with cement blocks and corrugated iron, we tried to reintroduce reed and adobe – presented as a Western invention under the veil of appropriate technology – but to no avail. Sadly, traditional vernacular is either dying or dead – with the ironic exception of the five star coral stone and thatch beach-hotels.

Yet working in both rich and poor worlds has been an intriguing exercise. The difference between the two is after all not that enormous – to make the most out of nothing or to make the least out of plenty. Realizing a hospital in the



Mtinko Health Centre in Singida by van Buiten and Folkers – making the most of limited resources.



Modesty, dignity and economy find simple expression at Mtinko. Wide verandahs provide shade.



Turiani Hospital Morogovo – a 200-bed rural hospital by van Buiten and Folkers, tempering the harsh climate.





Once a thriving trading centre, Tabora now languishes in the hot dusty plains of the savannah.



Matthijssse house, Dar es Salaam – trying to redefine and humanize the aspirations of wealthy clients.



The other end of the African spectrum – private villa in Dar es Salaam, also by van Buiten and Folkers.

middle of nowhere, for next to nothing, or redefining the aspirations of the incredibly rich to build an architecturally modest villa on a cliff overlooking the Indian Ocean.

Inevitably, Africa's relationship with and dependency on the rest of the world will be shaped by politics. Contemporary Dutch government policy is a typical example of short to mid-term development strategies. Mrs E. Herfkens, Minister of Development Cooperation, recently released new guidelines on technical assistance. In these guidelines there is little room left for presence of Western experts (engineers, doctors, management consultants, architects, agriculturists and teachers). Requests for assistance will have to be redefined and will have to be solely African-based and institutionalized. Moreover, work should be carried out using local capacity and resources. Foreign technical assistance is thus geared towards improvement of capacity and build-up of institutions.<sup>1</sup> This isn't new in theory, but the new

interpretation of the guidelines is certainly different. There is a clear intention to shift from a patronizing viewpoint – in which the request is often donor-invented and the execution donor-steered – towards a situation in which initiative and execution are completely within the recipient's responsibility. Technical assistance will thus become a means of transferring knowledge, not one-way directed, but reciprocal.

Through this shift in approach it is anticipated that the pace of development might be slowed. African nations are so used to being passive recipients, of plying themselves to suit trends in development aid, so it may come as a surprise when they are told to really stand up for their case. It might take some time, and in the transition period, it may be wise to not terminate projects that are essential for subsistence. Yet ultimately we cannot but agree with the guidelines and hope to be able to continue to play a role in the development of this crucial transfer of knowledge and skills.

And what does the African future have in store for architecture? We don't know whether ways have to be sought to rediscover pride in local culture or a synthesis of the now deeply buried traditional culture with the recently acquired Western knowledge. Perhaps something completely new will emerge, and it is a huge challenge to try to understand and anticipate what will happen. For the moment, Africa seems a desperate lost continent, exploited by its medieval ruling clans and the rest of the world. But the vital seed of rejuvenation, though perhaps deeply buried, will eventually surface. When, we don't yet know, but it will not be that far off. Africa is the continent of the future. *Ex Africa semper aliquid novi.*<sup>2</sup>

BELINDA VAN BUITEN, ANTONIS. FOLKERS

<sup>1</sup> 'Institutions' in the sense of society frameworks that provide structure to human behaviour; as rules of the game, in the form of laws, rules and habits. A rather Western approach to structuring human society.

<sup>2</sup> 'From Africa (comes) always something new'. Pliny.



## march

Next month's issue is devoted to the subject of architectural economy. Long before Mies made his celebrated pronouncement that 'Less is more', the economical exploitation of materials and form was a constant theme of architecture, whether through expediency or choice. Minimalism continues to run its fashionably arid course, but beyond the confines of expensively conceived houses and boutiques, there is scope for genuine architectural invention defined by parameters of economy and programme. We look at some of the most inspiring examples from around the world, including Edward Cullinan Architects' student housing for the University of East London, which infuses a basic, repetitive building type with imagination and vigour, bringing life to a

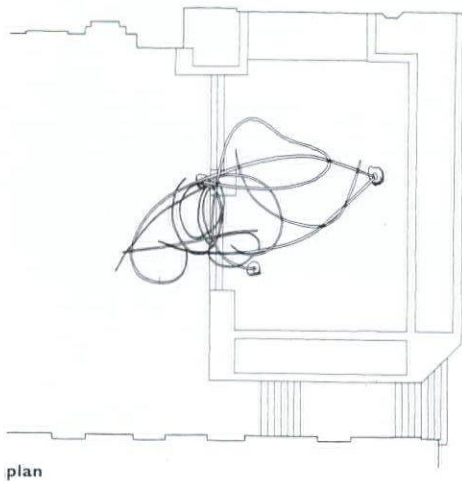
dreary campus in London's Docklands.

Contrast this with Sam Mockbee's student housing for Auburn University which combines placemaking with ingenious use of cheap materials. Mockbee has refined his approach to low cost construction and socially responsive design through work with his Rural Studio. Also in the next issue a compact portable theatre in the round by young Finnish partnership Casagrande and Rintala, law courts in Cartagena by Carlos Jurado and Jensen & Skodvin's viewing platform for Videster Falls, Norway. Plus the usual mixture of Interiors, Design Review and House. Buy the AR at a discount, and keep in touch with the richness of international architectural thinking by using the subscription form inside the front cover. Or subscribe through our website:

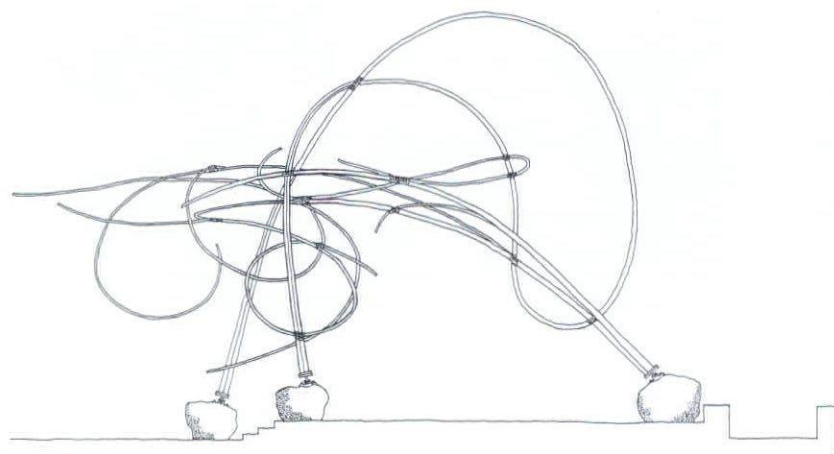
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## design review



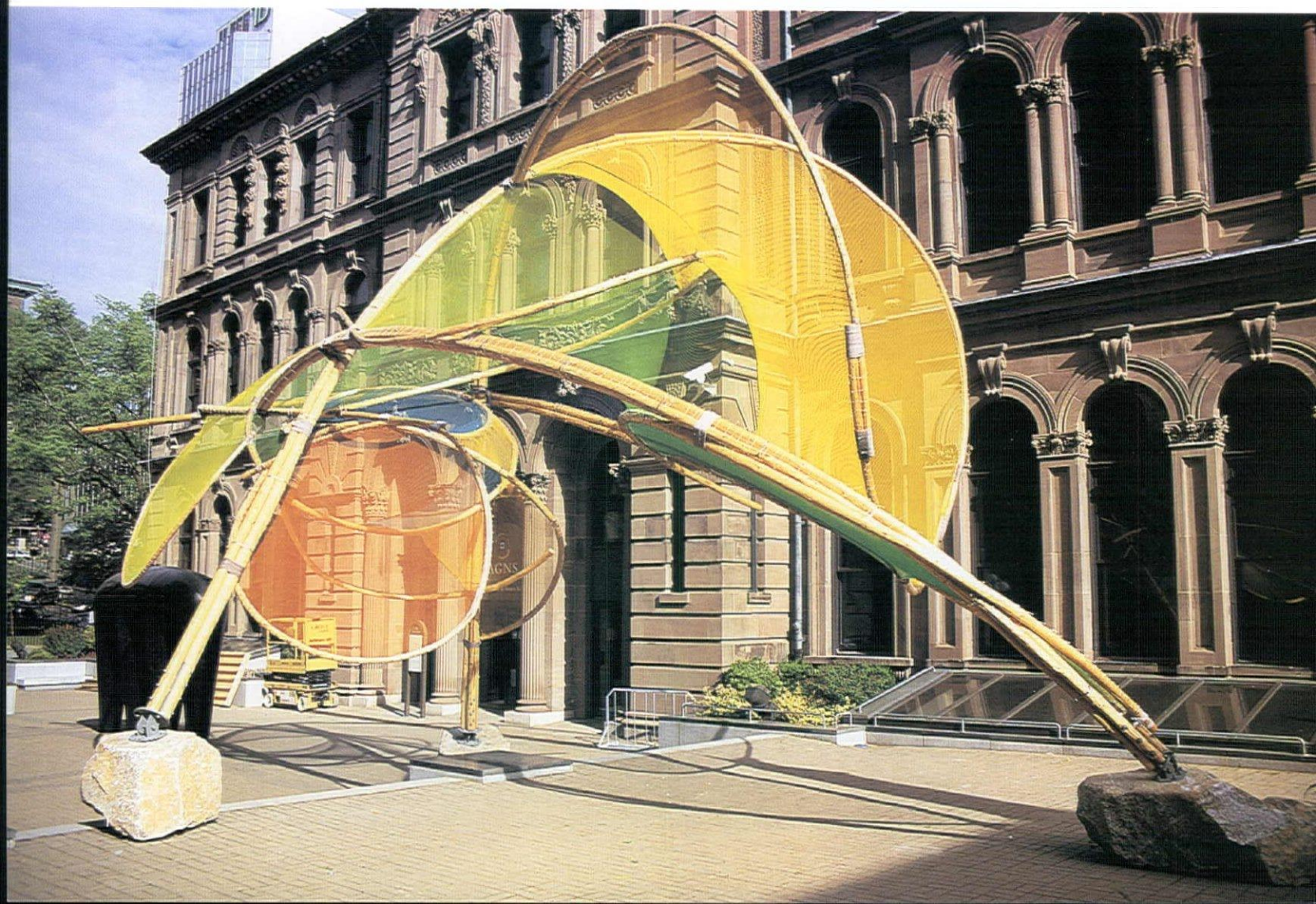
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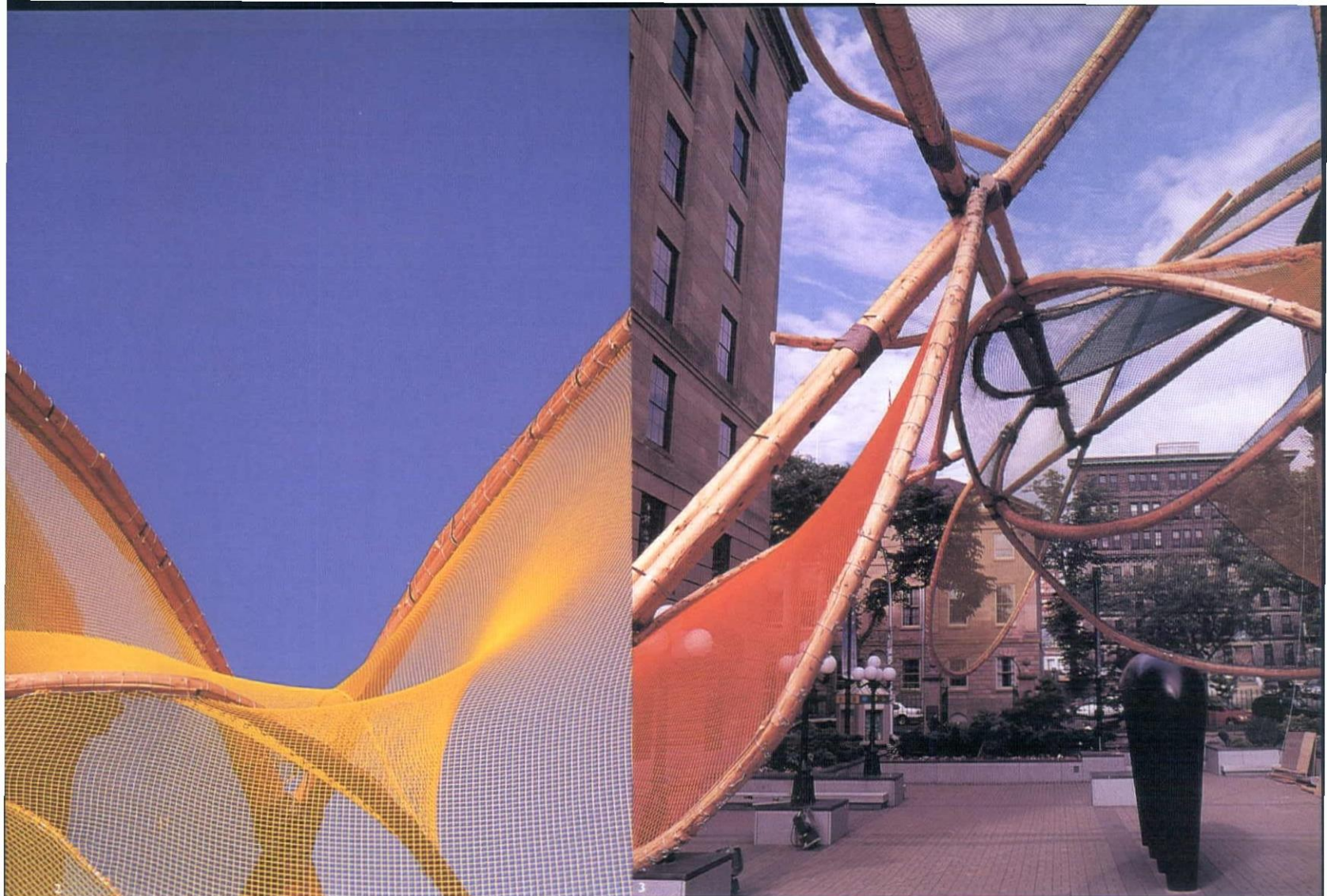
elevation

## SURFACE TENSION

Sinuuous and colourful, this ephemeral installation makes ingenious use of lightweight tensile construction techniques.







- 1  
The lightweight installation is a counterpoint to civic monumentality.
- 2  
Detail of colourful netting.
- 3  
The curved bentwood frame is laminated and spliced together.

Commissioned by the Art Gallery of Nova Scotia to celebrate the millennium, Hummingbird is an extraordinary experimental installation. Like a giant insect come to rest between two historic buildings in Halifax's central business district, this ephemeral work of architecture provides a challenging comment on the role of modern design in a city that promotes preservation at the expense of experimental architecture. Designed by Filum, a young Canadian practice, the project owes a clear debt to Modernist explorations of lightweight tensile architecture, especially the work of Frei Otto, whose German pavilion at the 1967 Montreal Expo and stadium for the Munich Olympics of 1972 presented entirely new and radical forms of lightweight structures. Yet since those early

experiments, tensile structures have only slowly evolved.

Hummingbird explores the potential for new forms using the construction and modelling techniques of lightweight structures. Reflexively curving back on itself, the structure adopts a morphology of curves and planes that collide freely into one another, almost accidentally. Multiple layers of nets stretched over the structural frame create a dramatic and ever-changing play of opacity and translucency as the viewer moves in and around the installation.

Constructed from bentwood, Hummingbird draws on recent investigations by Buro Happold in England and Richard Kroeker in Canada into the design of large-scale structures using green timber. In this case, Filum chose to work with small

diameter conifers that grow in abundance in the Eastern regions of Canada. By using small, freshly cut spruce trees rather than dry lumber, the cumbersome process of steaming was avoided. To bend the green wood into complex curves, a technique was devised that involved cold-forming the timber onto moulds, dry laminating it with nails rather than glue, and then staggering the splices to achieve visual and structural continuity. The result is that each laminated member flows into the next one, a process that could be repeated indefinitely. To complete the installation, hand-dyed nets were stretched into place like webbing on a snowshoe; applied while wet, they prestressed the structure as they dried. Free-form, colourful and

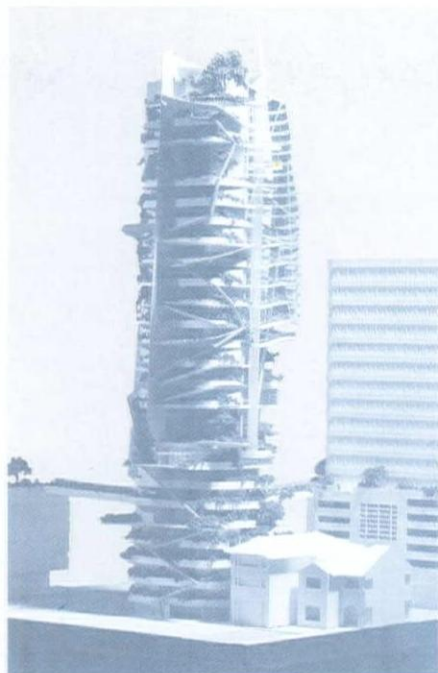
ephemeral, the structure stands as a counterpoint to the permanent, monumental architecture that surrounds it. Like the *dérive* of the Situationists, it disturbs old assumptions and encourages new forms of interaction that have nothing to do with consumption, circulation or tourism. Provocative and unsettling, Hummingbird brings pedestrians to a halt, but does not dictate the activities which might happen in and around it. Rather, it creates a space which is open to interpretation and spontaneity, adding to the life of the city. C. S.

**Architect**  
Filum, Halifax, Canada  
**Photographs**  
Steve Farmer, 1  
Chad Jamieson, 2  
Chris Macy, 3



# SPECULATING ON THE CBD

The Central Business District is one of the most distinctive and inevitable features of the cities of our age. We should evolve proposals for humanizing the CBD.



Ken Yeang's radical eco tower scheme for Singapore.  
Opposite: Manhattan, mother of CBDs.

The modern workplace, both factory and office, emerged at the turn of the eighteenth century. Life, for all parts of society, was transformed. Still today, during the week most of us spend more waking time at work than at home. Even with the advent of electronic methods of working, the pattern tends to continue in offices, and for those in manufacturing industry there is virtually no escape from the workplace on weekdays (though of course hours are shorter than they were two hundred years ago).

Transformations of former country areas made by the Promethean outbursts of the Industrial Revolution are notorious. Alterations to the urban fabric of cities are less often discussed. As late as the mid nineteenth century, many merchants lived over their shops and businesses. Cities were a mixture of dwellings, workplaces, and places for leisure, worship and congregation. Today, many of us look through rose-tinted spectacles at the cosy lamp-lit Dickensian vision that such a mixture conjures up, and welcome it when we come across echoes, electrified, cleaned up and made tolerable by modern medicine in the provincial towns of France and Italy.

## The urban revolution

But in the great cities, matters started to change rapidly in the 1830s, while Dickens was still a young man. In the urban revolution, a new kind of building devoted entirely to business began to emerge, not only for individual firms, but let out as individual floors or rooms for several different companies. The speculative office block was born, at first in London, then Glasgow and Manchester, then the world. Big city life already began to be compartmentalized into office working areas (mixed to some extent with manufacture) and those for other activities. The tendency was greatly accelerated by the explosion of efficient transport in the later 1800s. Land in the business areas became more valuable, and particularly in those constrained by topography like Manhattan and Chicago's loop, buildings became higher and higher: Central Business Districts (CBDs) in embryo.

Now, every city with pretensions to being a business centre has to have a CBD dominated by speculative office blocks as tall as their developers and planners can make them. Frankfurt has made a Frankenstein Manhattan on Main to advertise its ambitions of being Europe's premier business centre.<sup>1</sup> Singapore has replaced almost all its traditional fabric with ever higher towers and lumbering business elephants. From a distance and on a good day, most CBDs can look wonderfully romantic: picturesque clusters of towers fingering the sky, glittering in the sunlight. But in inclement weather, in among the towers the down draughts captured by the tall buildings bucket wind and rain into your face as you scurry from office to underground, the streets are corridors of gloom, with nowhere to shelter in or escape to.

## Mother of CBDs

Yet there is a good deal to be said for density. Curiously, Manhattan, mother of CBDs, has many lessons to teach about creating business districts and the buildings which form them. Although there are clear differences between different parts, functions are quite mixed, with domestic as well as business towers forming the sky-line; places for entertainment and congregation are intermingled. Perhaps most important of all, shops, eating places and bars are frequently to be found at street level in even the most built-up districts. As Jane Jacobs pointed out many years ago,<sup>2</sup> there is a real sense of life in Manhattan, generated by mix of functions and ownerships; it can sometimes seem rather like a twentieth-century version of a traditional European city made vertical, completely unlike Houston or Los Angeles with their much lower density and domination by cars. New York skyscrapers also offer that splendid invention, the semi-public lobby, which not only acts as a place of shelter but also offers a variety of services and small shops to both people who work in the floors above and to passers-by.



Not many Manhattan commercial buildings are worth remembering in particular, for instance the Chrysler, and even the Trump – if you have a taste for such things. Some are positively aggressively desperate to be memorable monuments to their developers, though it is difficult to find any quite as brutish as some of the '70s and '80s City of London towers, or so crass as the lower hulks at Canary Wharf.

Renzo Piano knows that his tower in Sydney (p44) has to be memorable, but it is far from aggressive. He has evolved an elegant, new form of skyscraper that responds specifically to its magnificent site and the sometimes difficult climate. It certainly makes a memorable figure among its mostly mediocre neighbours, and has strange echoes of a distinguished predecessor, the '50s Pirelli Tower in Milan by Gio Ponti (and others), which has always been held to be one of the very best European skyscrapers of its time.

### Ideal twenty-first century city

Sydney has undoubtedly acquired a splendid addition. But in some ways, it seems strangely old fashioned. Compared to good modern German buildings like Foster's Frankfurt Commerzbank (AR July 1997), or Christoph Ingenhoven's RWE headquarters building in Essen (AR July 1997), both clumsier buildings, the tower itself seems strangely indifferent to environmental concerns, particularly as the architect's work has always been associated with greenness. (Piano's lower residential block with its deep winter gardens is quite another matter, and could surely help set an eco-friendly urban pattern.)

The new Rogers building in the City of London (p50) makes a similarly memorable figure, and offers a very welcome strategy for giving urban decency to the huge office masses which are generated by the collision between planning laws and the world market in capital, that often end up as lumpen hulks (one of which is next door). Carved in plan and section, the great volume is given human scale outside and in. Like Piano in Sydney, Rogers' Wood Street makes memorable places. But similarly, it is not particularly responsive to the new environmental concerns: control of the internal climate given to individuals, maximizing ambient forces, and multiple energy conservation measures.

Ken Yeang has been most radical in trying to green the skyscraper,<sup>3</sup> and though his specific prescriptions are usually tailored to tropical latitudes, his designs have lessons for other climates. But,

significantly, his most radical schemes like the Singapore tower project with its mixed uses and elaborate vegetation (AR February 1999) remain on paper. One of the main reasons for this is surely the development and planning process. Ideally, CBDs would include more uses than business, would be environmentally responsible, and would have a three-dimensional lattice of spaces ranging from the fully public, to the completely private, with all sorts of nuances in between. Piano's glazed public space between the two elements of his composition (p44) is a fragment of this ideal tapestry, and of course the inclusion of the residential element of the scheme (required of the developer by the planners) is another element of the ideal modern city. But the two blocks themselves are essentially private. Rogers' long entrance hall (p50) could have been a real contribution to the life of the city, rather like a Manhattan lobby (and it was apparently intended to be so at first). Management changes prevented the proposal.

Yet such small elements prompt speculation about what the ideal twenty-first century city centre might be like. At ground level, there would be a network of arcades, little squares (often glazed in northern parts), and lobbies, all serving what Richard MacCormac has called 'local transactions'.<sup>4</sup> Above, towers would separate from each other into private territories, either commercial or domestic, or preferably mixed *à la* Yeang. There would be a profusion of planting, and every city would be different, because its architecture would respond to local topography and climate. At the moment, all this is largely a dream, but it is not entirely beyond realization. Both architects and planners must have the courage to show the public (who in the end decide) how living in city centres can be improved if only we have the will – how the mighty forces of bureaucracy and business can be channelled into making inner cities which are palimpsests for decent, rich and varied human life not totally dominated by work. We need a new urban revolution to bring back the human characteristics of cities lost in the first one – and we can achieve it. P.D.

1 Other parts of the city are quite pleasant though.

2 Jacobs, Jane (1961), *The Death and Life of Great American Cities*, New York: Random House.

3 For instance in *The Skyscraper, Bioclimatically Considered: a Design Primer*, AR August 1997.

4 MacCormac put forward the theory of local and general transactions in AR March 1994. Local transactions are things you do at street level: eating, shopping and so on. General transactions are to do with the whole economy.





**PARLIAMENTARY BUILDING,  
WESTMINSTER, LONDON**

ARCHITECT

**MICHAEL HOPKINS & PARTNERS**

To build between Norman Shaw and Sir C. Barry working with A. W. N. Pugin was not the easiest task in the world. The parliamentary bank of the Thames must be one of the most photographed riversides in the world. Making an addition to it was clearly one of the most worrisome tasks in modern architecture. Scale, materials, and that old fashioned attribute, aspect, were all extremely problematic. And so was working for a committee of Members of Parliament, who are doubtless not the easiest of clients.

So far, press and public opinion have not been entirely kind to the Hopkins' new Parliamentary Building. 'Heavy' and 'ugly' are adjectives often applied – but they were as well to both the Houses of Parliament, and Shaw's New Scotland Yard, the headquarters of the Metropolitan Police, once described as a 'very constabulary kind of building'. Charles Barry's design for the Houses of Parliament was selected largely because it provided 'an extended river facade of uniform character',<sup>1</sup> a decision attacked equally by the Neo-Classacists, who wanted a proper building with the complete works of the Orders, and by the rising Neo-Goth school for whom the relative symmetry and regularity of the front were anathema. Even Pugin, Barry's partner who did all the Gothic detailing, was worried about the result; on a boat travelling down from Chelsea, he waved at the great building then emerging (without, as yet, its picturesque towers) and

## COMMONS SENSE

The extension to the Houses of Parliament, built to house MPs' offices relieving unbearable crowding in the old place, is one of central London's most controversial buildings. In many ways it is also one of the most ingenious.

<sup>1</sup> Left to right Houses of Parliament and Big Ben's tower (Barry & Pugin), Hopkins' Portcullis House, Norman Shaw's New Scotland Yard (the old headquarters of the Metropolitan Police, now used as MPs' offices).

<sup>2</sup> From Parliament Square, with Bridge Street between new building and Houses of Parliament.

<sup>3</sup> From Big Ben's tower, Bridge Street foreground.

<sup>4</sup> Expression of building is largely determined by structure and services, and its nature as a hive of little rooms. From New Palace Yard.











## PARLIAMENTARY BUILDING, WESTMINSTER, LONDON

ARCHITECT

**MICHAEL HOPKINS & PARTNERS**

5  
Inside court above the great glass roof. Stone wall piers become more slender as they rise, and loads become lighter. They also act as ventilation ducts, connected to air handling flues on roof.

6  
Great central space is intended for strolling and casual meetings, like lobbies of Barry and Pugin's building.

7  
Light reflectors of spun aluminium add sparkle to glass roof at night.

8  
Structure of glass roof is American oak, flitched and connected by stainless-steel members.

exclaimed to a friend 'All Grecian, Sir; Tudor details on a classic body'.<sup>2</sup> I think that, eventually, the new Hopkins building will seem to settle into its context as assuredly as its once controversial neighbours, leaving Big Ben's tower to dominate the whole composition.

The new building is made with great sensitivity for both site and users. The latter are 210 MPs and their staff – overflowing from the Neo-Gothic building across Bridge Street, in which they had become dreadfully cramped, as the population of the House grew with the elaboration of democracy and the colossal explosion of communications. Portcullis House (not perhaps the happiest of names) is a key link in what the architects call a 'Parliamentary campus', which runs from the Shaw buildings and further south to the Commons Chamber.<sup>3</sup> Corridors and tunnels (the main one under Bridge Street) allow MPs to get from their rooms to the great space in time to vote when the division bell rings.

A court surrounded by a wall of individual rooms was the generating idea of the building. It was derived equally from the archetypal form of Oxford and Cambridge colleges, and from the new eco-thinking which comes largely from Germany, where thin plan forms are welcomed because they allow daylight to reduce need for artificial illumination, and where individual offices are required by management and unions alike.

The parti of the building emerges from complex intercourse between urban, social and ecological ideals.

In conventional urban analysis, the building could not be bettered. It has shops at street level, a piano nobile on the first floor, where there are committee and meeting rooms, intermediate levels of MPs' offices, and an attic which contains climate control services and a few very lucky MPs, who have the most exquisite views. It fits into Bridge Street with a grain similar to the jumbly Classicism of the area. And it faces the river with the same strategy, in which individual rooms are the generator of the scale of the elevations – not very different from that of the Palace of Westminster itself. Each MP's office has an oriel window, in which its tenant can calmly sit and look over the river, or Pugin, or Shaw or the endlessly changing pantomime of life in Whitehall.

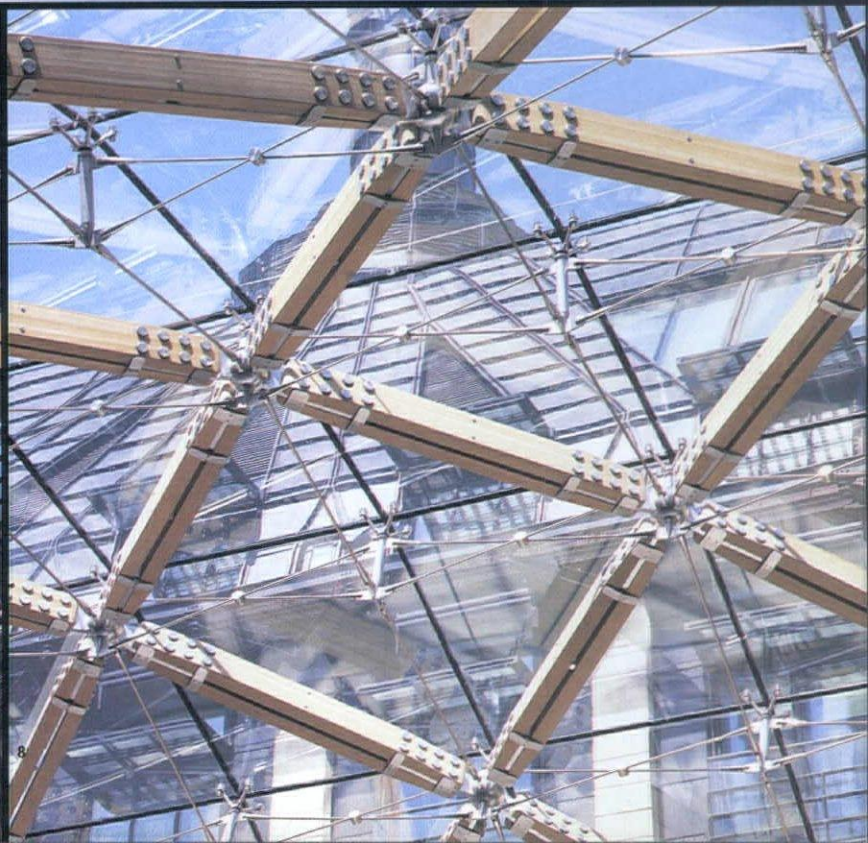
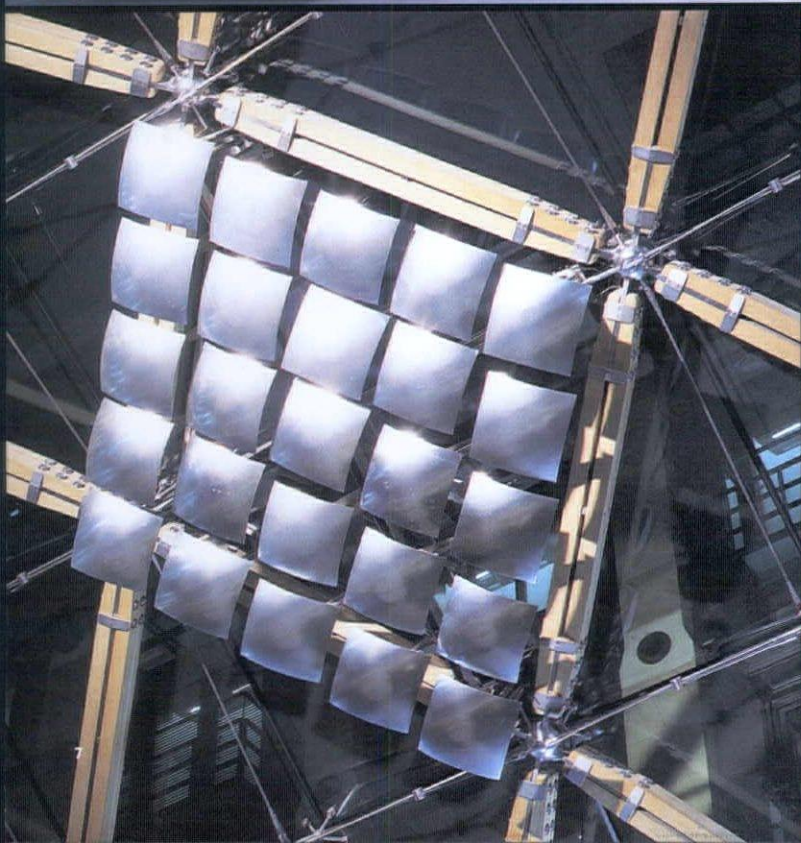
The rectangular wall of rooms surrounds a central court that cannot be seen from the outside. Here, a glass roof is supported on American oak members flitched and bolted together with stainless steel. A grove of clipped trees is intended to evoke academe. It is hoped to generate casual conversation, occasional meetings, to be a forum of the whole campus: gossip, wit and other chatter are supposed to enliven the scene. Would Pitt, or Gladstone or Attlee have been happy in the place? You can certainly see Churchill strolling down the avenue puffing his cigar

(would he be allowed to smoke nowadays?); the shade of Disraeli doing deals dodges about behind the trees; and Peel in his top hat would clearly be at home, inventing his coppers, who ended up in Norman Shaw's building next door. Parliamentarians of all times are bred out of the same stuff: they want to strut and they want to talk.

The glass roof is carried on props which fan from six main nodes that emerge here as columns. No site can have been more complex to organize. Two underground railway lines run under it at different angles. The architects were responsible for the very complex Piranesian tube station underneath the building (AR June 2000), the complications of which meant that the weight of most of the upper structure had to be carried down on just six points. Loads of the perimeter walls are taken down through their stone structure, but those from the inner court are borne by the columns, to which weight is carried by stone arches.

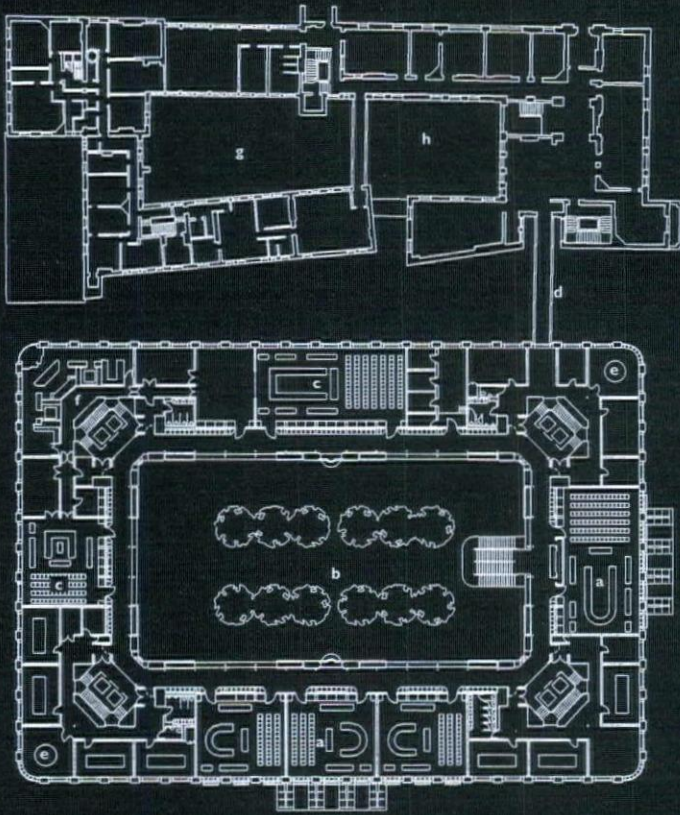
Walls are piers of Derbyshire gritstone, which gradually become more slender storey by storey as they go up, reflecting their load pattern. Between the stone strips are bronze window frames and spandrels. These are all materials chosen to last, and to relate the Neo-Gothic pile across Bridge Street. As well as being load-bearing, the piers are part of an elaborate climate control system. They form ducts which draw out exhaust air and replace it with fresh. The most controversial





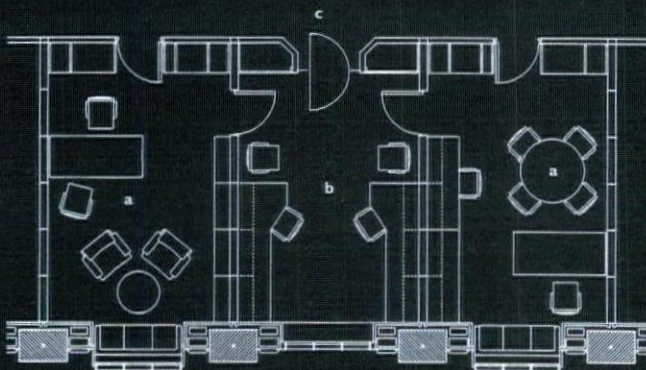


**PARLIAMENTARY BUILDING,  
WESTMINSTER, LONDON**  
ARCHITECT  
**MICHAEL HOPKINS & PARTNERS**

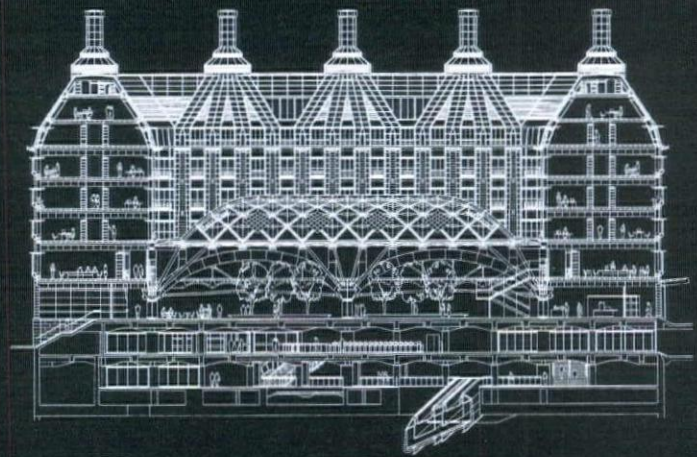


first floor (scale approx 1:1300)

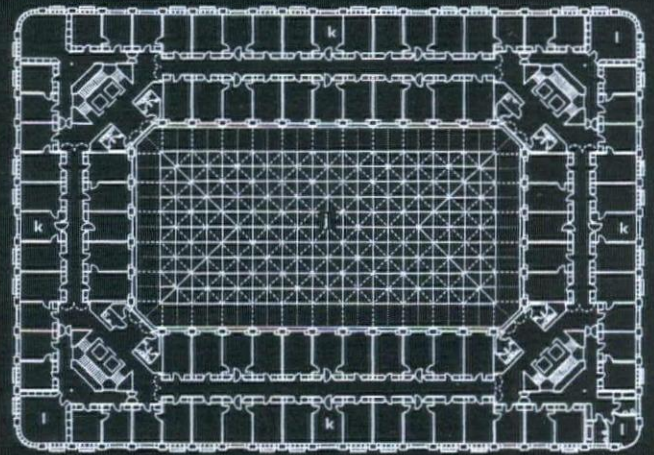
- key to plans above**
- |                         |                                         |
|-------------------------|-----------------------------------------|
| a select committee room | g no. 1 Canon Row                       |
| b court                 | h New Scotland Yard (Norman Shaw South) |
| c conference            | j courtyard roof                        |
| d bridge                | k offices                               |
| e meeting               | l coffee/reading                        |
| f finishing kitchen     |                                         |



- a MP  
b staff  
c corridor

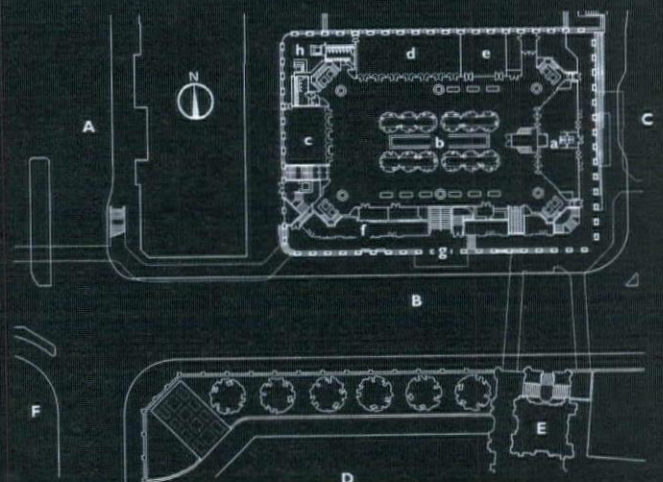


west-east section



second to fourth floors

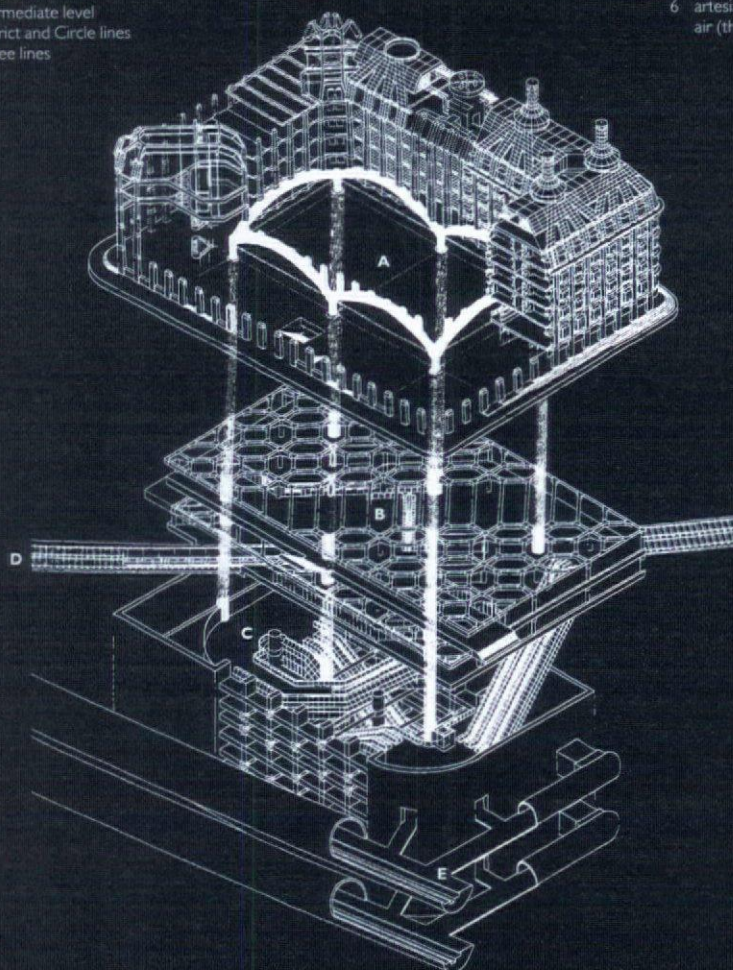
- key to plan below**
- |                       |                             |
|-----------------------|-----------------------------|
| A Parliament Street   | a main entrance             |
| B Bridge Street       | b court                     |
| C Victoria Embankment | c restaurant (with waiters) |
| D New Palace Yard     | d self-service restaurant   |
| E Big Ben's Tower     | e library                   |
| F Parliament Square   | f shops                     |
|                       | g arcade                    |
|                       | h kitchen                   |



site plan at street level (scale approx 1:3100)

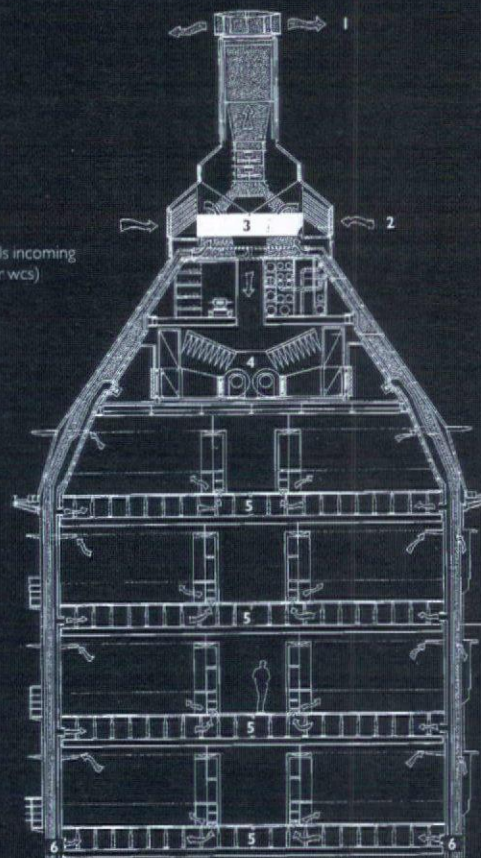


- A court
- B ticket hall
- C intermediate level
- D District and Circle lines
- E Jubilee lines

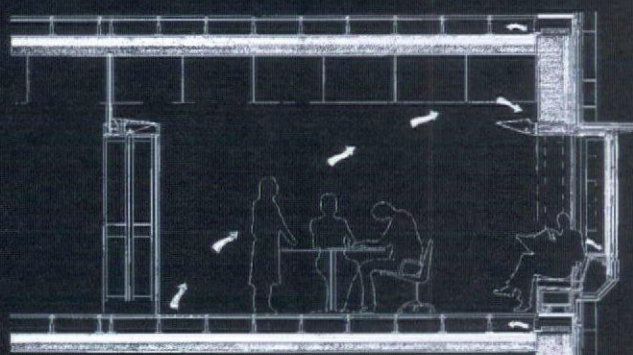


exploded projection of Portcullis House over underground station

- 1 exhaust air out
- 2 fresh air in
- 3 heat exchanger
- 4 supply air handling
- 5 supply plenums
- 6 artesian well water cools incoming air (then water used for wcs)

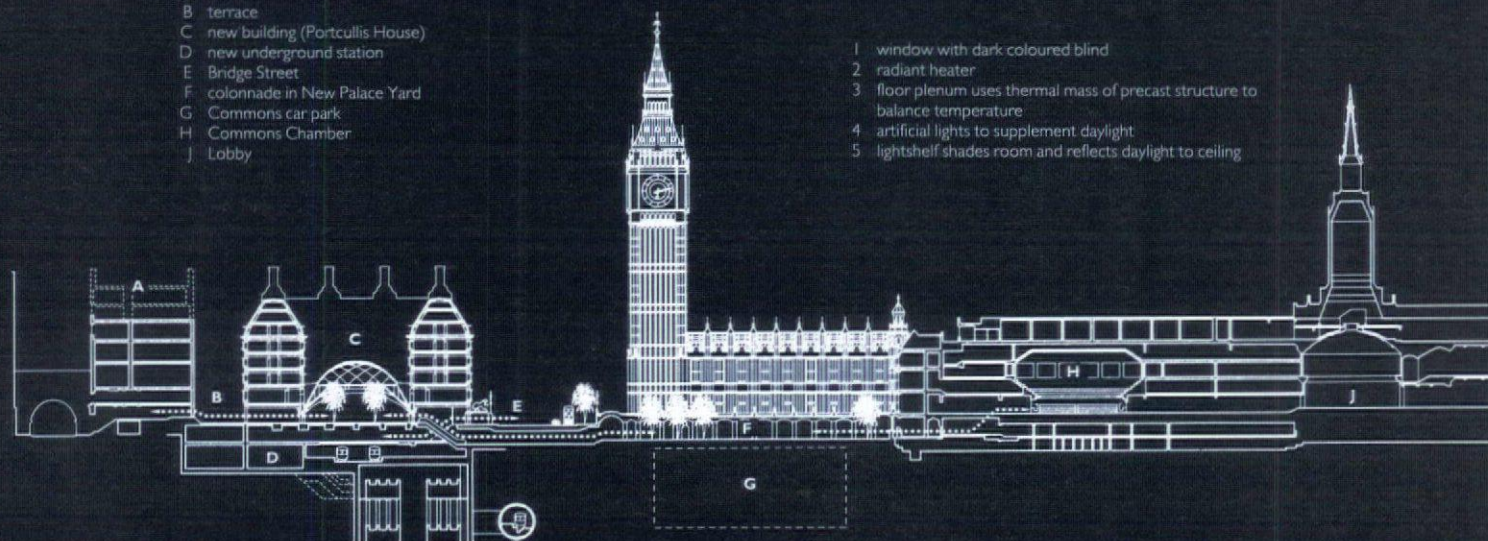


overall principles of air handling



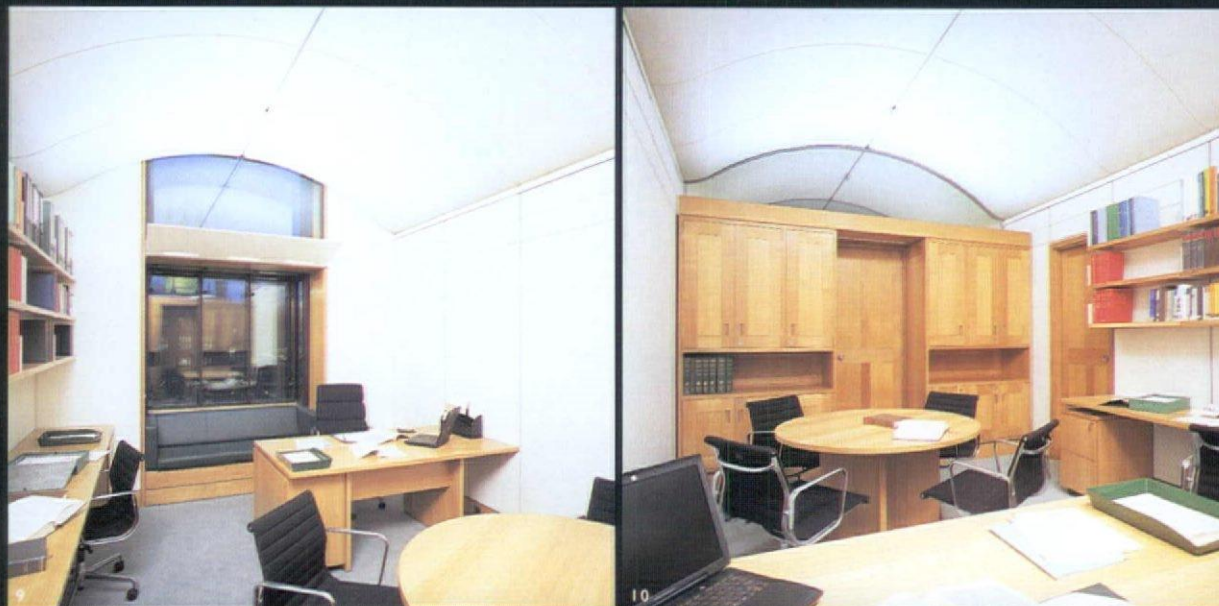
principles of air flow and lighting in offices

- A Norman Shaw South
- B terrace
- C new building (Portcullis House)
- D new underground station
- E Bridge Street
- F colonnade in New Palace Yard
- G Commons car park
- H Commons Chamber
- J Lobby



north-south site section through parliamentary campus showing partly underground route to Commons Chamber





**PARLIAMENTARY BUILDING,  
WESTMINSTER, LONDON**

ARCHITECT

**MICHAEL HOPKINS & PARTNERS**

9,10

MPs' offices each have oriel windows. Furniture and fittings in English oak. Vaulted ceiling is precast concrete.

11

Oriels are expressed in bronze externally. Above each bay is a sun modifier of prismatic glass, which provides shade and reflects light up to ceiling of room.

12

Junction of glass roof and main structure with fanning props taking roof loads down to six main loadbearing nodes, which ...

13

... are connected by massive arches that carry loads of inner walls and office strips.

and dramatic elements of the building, the 14 thermal chimneys, are clearly related to the pilaster-like piers by patinated aluminium bronze plate ducts which run slantwise across the roof slope. Precedents for the chimneys are to be found in Barry and Pugin's building, where a ventilation expert Dr Reid, required large vertical ducts that Pugin used as opportunities to make the central flèche and what Pevsner called 'pretty turrets'.<sup>4</sup> Pevsner thought that these late-added elements delighted Pugin, enabling him to make the silhouette more picturesque and romantic.

The Hopkins flues are not pretty – picturesque yes, but rather severe, like a conclave of tall dark chefs' hats or Bashi-Bazouks' headdresses. They very much resemble the chimneys on the Imperial kitchens of Topkapi Palace in Istanbul. Cynics call them monuments to the hot air generated by the politicians within. Certainly, they signal meeting and appear to natter to each other, and to Shaw's monumental chimneys of New Scotland Yard. They contain complicated mechanisms whereby exhaust air is thrown out at the top, after passing through a heat exchanger. Fresh air is drawn in at the bases of the contraptions, modified by the temperature of the expelled gases, processed and filtered in the attic, and then led down ducts parallel to the exhaust ones into the plenum floors of the offices. From these, it is fed into the individual rooms at low velocity from near

the inner walls. Stale air is drawn out over the oriel windows to go back up to the chimneys. Users (staff and MPs) can modify the air supply, just as they can manipulate lighting levels by adjusting artificial lighting and the solar blinds. Special radiant heaters warm MPs lolling on the sofas in the oriels. Amazingly, these places are quiet. Heavy glazing almost totally reduces the racket of the surrounding roads. Street-facing rooms have fixed windows; those overlooking the court can be opened.

Fixed horizontal prismatic louvres above the oriels both shade the windows from the sun, and serve to reflect daylight up to the soffits of the perfectly formed precast vaults which calmly ceil each room. Luminance is warmed by the English oak of the doors and furniture, elsewhere, everything is extremely simple: partitions, soft grey ceilings and grey carpet. Clerestories over the bookcases of the inner wall allow light to seep from the ceilings of the offices into the corridors, so the normally dull and forbidding double-banked plan is actually rather cheerful – but still inevitably institutional.

Usually, MPs' rooms are grouped in pairs, with a room between for secretarial staff who (significantly perhaps) do not enjoy an oriel window. This evocation of the good old early twentieth-century pattern of work arrangements, typified in Wright's Larkin building where a secretary sat between each pair of executives, was requested by most MPs. But there are a good many different





configurations, both of individual rooms and suites.

You would have to be a very ungrateful MP indeed if you took exception to what we, the taxpayers, have provided. Portcullis House is grand (in a quiet way), comfortable and convenient, both private and public, and it's built to last. The politicians had better get on and show that they are worthy of the place, and that they can do better because they have it. P.D.

1. Ferrey, Benjamin, *Recollections of Pugin*, reprint by the Scholar Press, London 1978, p241.

2. *Ibid*, p248.

3. Rebuilt by Giles Gilbert Scott, after war-time bombing, in a modified form of Puginism.

4. Pevsner, Nikolaus, *London*, Volume One (revised by Bridget Cherry), Penguin, Harmondsworth, third edition, 1973, p523.

#### Architect

Michael Hopkins & Partners, London

#### Design team

Michael Hopkins, John Pringle, David Selby,

Pam Bate, Patrick Nee

#### Structural engineer

Ove Arup & Partners

#### Building services engineer

Ove Arup & Partners

#### Facade engineering

Ove Arup & Partners

#### Quantity surveyor

Gardiner & Theobald

#### Project management

Schal International Management Ltd

#### Construction management

Laing Management

#### Cladding

Dove Brothers, Essex

#### Photographs

All photographs are by Richard Davies apart from nos 1 and 4 which are by Peter MacKinven/VIEW





At first glance Renzo Piano, so much the aficionado's architect, was an odd choice for the speculative redevelopment of one of Sydney's last downtown, tower-capable sites. A second look, however, shows the Renzo factor at work. The Aurora site, in the heart of Sydney's legal-financial quarter, was then occupied by Ken Woolley's Brutalist but recently-vacated State Office Block, or SOB (no, really). The SOB was architecturally accomplished (the lyrical juxtaposition of glass and concrete, the use of transparency and reflection, the muscular bronze-clad columns) and widely admired within the profession. Being a 1960s office building, though, it was also a curmudgeonly old thing: stuffed with asbestos, cursed with inadequate floor-to-floors, replete with in-situ concrete and generally resistant to change. Permission for its demolition was sought and proposals made. Then, just as the modern-heritage lobby was beginning a low growl, Lend Lease Development pulled Renzo out of a hat.

Lend Lease had selected Piano from a global shortlist after two normally sober development execs visited the Renzo Piano Building Workshop (RPBW) at Vesima, out of Genoa, and fell head over Zegna heels in love with the whole ideas-praxis-beauty thing that tumbles glassily down the escarpment there to the Med (AR September 1995). Seduction perhaps, but it's the seductive power of a highly evolved thought process. And it was the same euphoriant mix of intelligence, practicality and charm that

allowed Piano to clear a swathe for Lend Lease through Sydney's tangled thickets of heritage, citypolitik and planning controls.

Piano's brief from Lend Lease had three main planks: context, architectonics and social innovation. The contextual job was to respond sensitively at several scales 'from the grand sweep of harbour and opera house down to the level of civic space' on and to a site which was narrow, controversial, overgrown with planning controls and plum in a prime civic/sandstone precinct, opposite the Botanic Gardens and a gentleman's stroll from Parliament. Architecturally, Piano was asked to explore facade technology to create a landmark urban sculpture with plausible environmental credentials. (He was also keen, this most practical practitioner of the world's most material art, to continue his old pursuit of the immateriality thing.) And in social terms the idea was to reinvent the corporate workplace, making it more open, more humane, more real, if you will. And of course the building had to be commercially viable, conforming to all the thumb-rules regarding floorspace, office depth, core location and so on. The thing had to sell.

Imagine the Norman Foster response to such a brief: layers of parallel systemic diagrams showing how the various problems – circulation, structure, air movement and so on – are collectively solved by a single ingenious parti. Piano's design does something similar, only without the diagrams and in a single, voluptuous flourish. The idea is essentially simple: to wrap the building in a

ghostly white facade which is perfectly smooth along its length but dissolves into sky at the top and peels away at each end, allowing the building to breathe. Thus wrapped, Aurora Place resembles nothing so much as some exquisite neo-oriental canapé, tastily cocooned in the latest translucent rice pastry.

It's a multi-functional pastry though. The rooftop 'sail', extending some 30m above the 44th floor, waves symbolically to the opera house and the world; the cantilevered fins at either end of the building provide vertical, wind-protected slots within which Piano's wintergardens give real-air breathing space to each floor; and the smooth-bellied facade itself, fritted with baked-on ceramic dots at various scales, provides a semi-opaque ghostly-look from without, transparency from within. Glass edges, at the top of the sail and hanging over the street, are terrifyingly naked: dissolving, as it were, into the ether.

That was the idea. Making it real has been a smidgeon trickier. Indeed, it is a tribute to the team, itself a complex of RPBW, Lend Lease Development (joint client), East Asia Property Group (joint client), and Bovis Lend Lease (builder/project manager), that they were able to bring such an eminently breakable idea through the process more or less intact. There must have been some memorable meetings.

Take the sail. How do you persuade a curved glass triangle to cantilever 30m into the sky, well above terra firma in a city prone



## DAWN OF A NEW AGE?

Sydney is one of the most romantic sites in the world, but few of the towers which make up its famous skyline are distinguished architecturally. Renzo Piano's office and apartment blocks set a new standard of thoughtful elegance.



MIXED DEVELOPMENT, SYDNEY,  
AUSTRALIA

ARCHITECT

RENZO PIANO BUILDING WORKSHOP

1,2

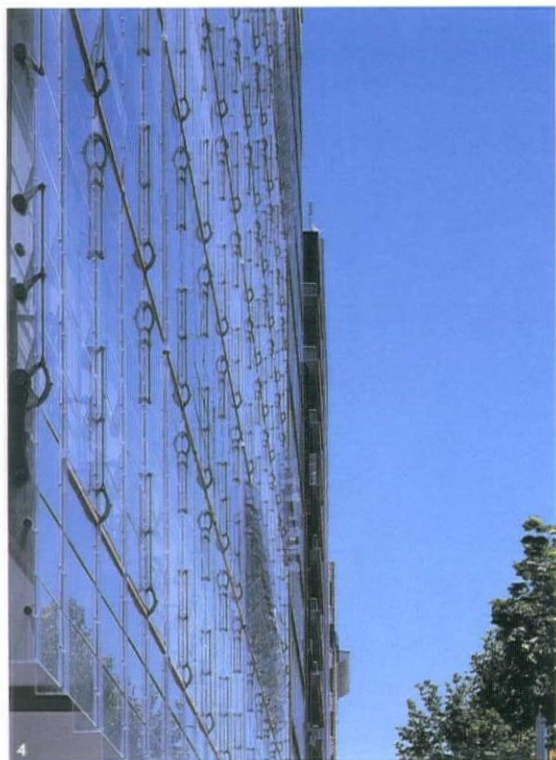
"The gorgeous white ghost" with its little brother look out over Macquarie Street to Sydney's wonderful Botanic Gardens. And (from the tower's upper floors) the Harbour.

3

Curved ends of tower protect vertical slots with wintergardens at each end of office floors.

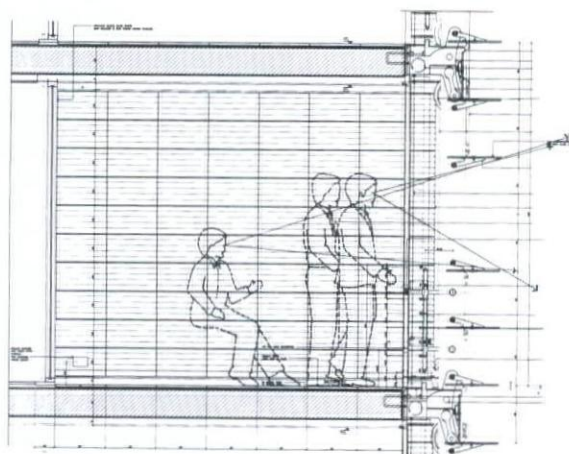




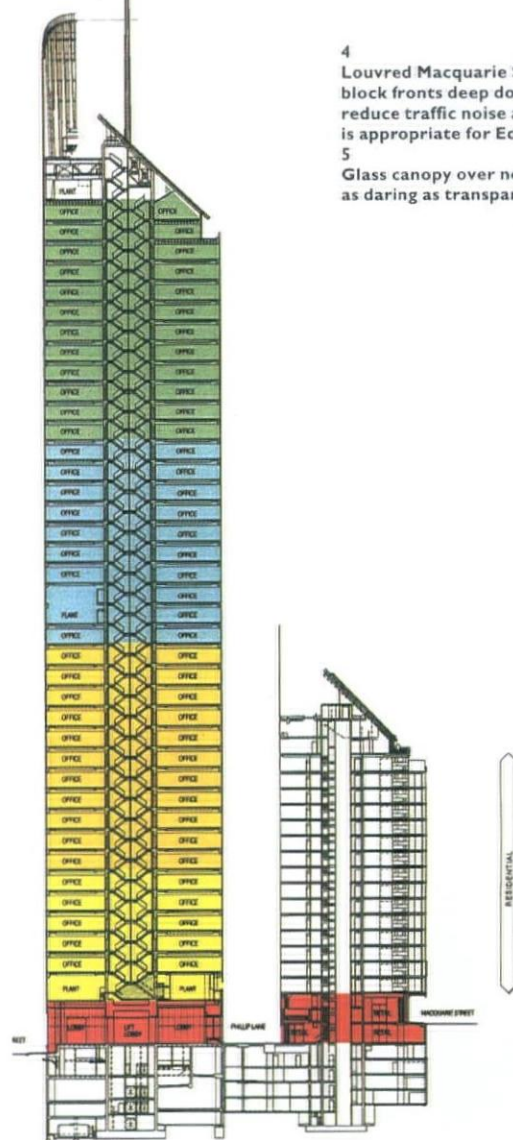


**MIXED DEVELOPMENT, SYDNEY,  
AUSTRALIA**  
ARCHITECT  
**RENZO PIANO BUILDING WORKSHOP**

- 4  
Louvred Macquarie Street wall of residential  
block fronts deep domestic wintergardens which  
reduce traffic noise and can move in banks. Scale  
is appropriate for Edwardian street.
- 5  
Glass canopy over new Aurora Place forecourt is  
as daring as transparent sail at top of tower.

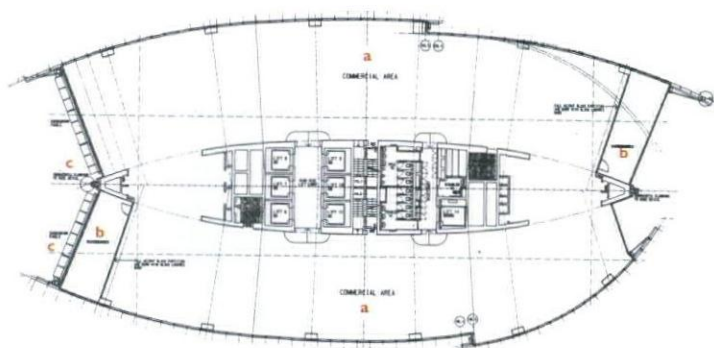


detail of residential wintergarden louvred wall (scale approx 1:70)



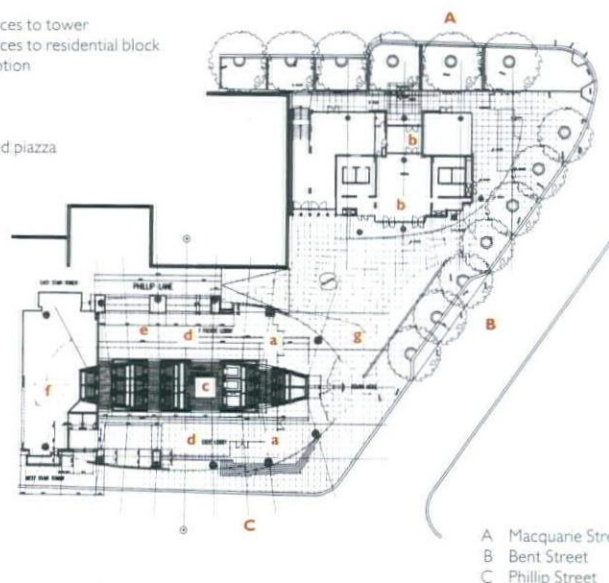
west-east section

- a commercial area  
b wintergarden  
c sunshade panels



typical higher level office floor (scale approx 1:400)

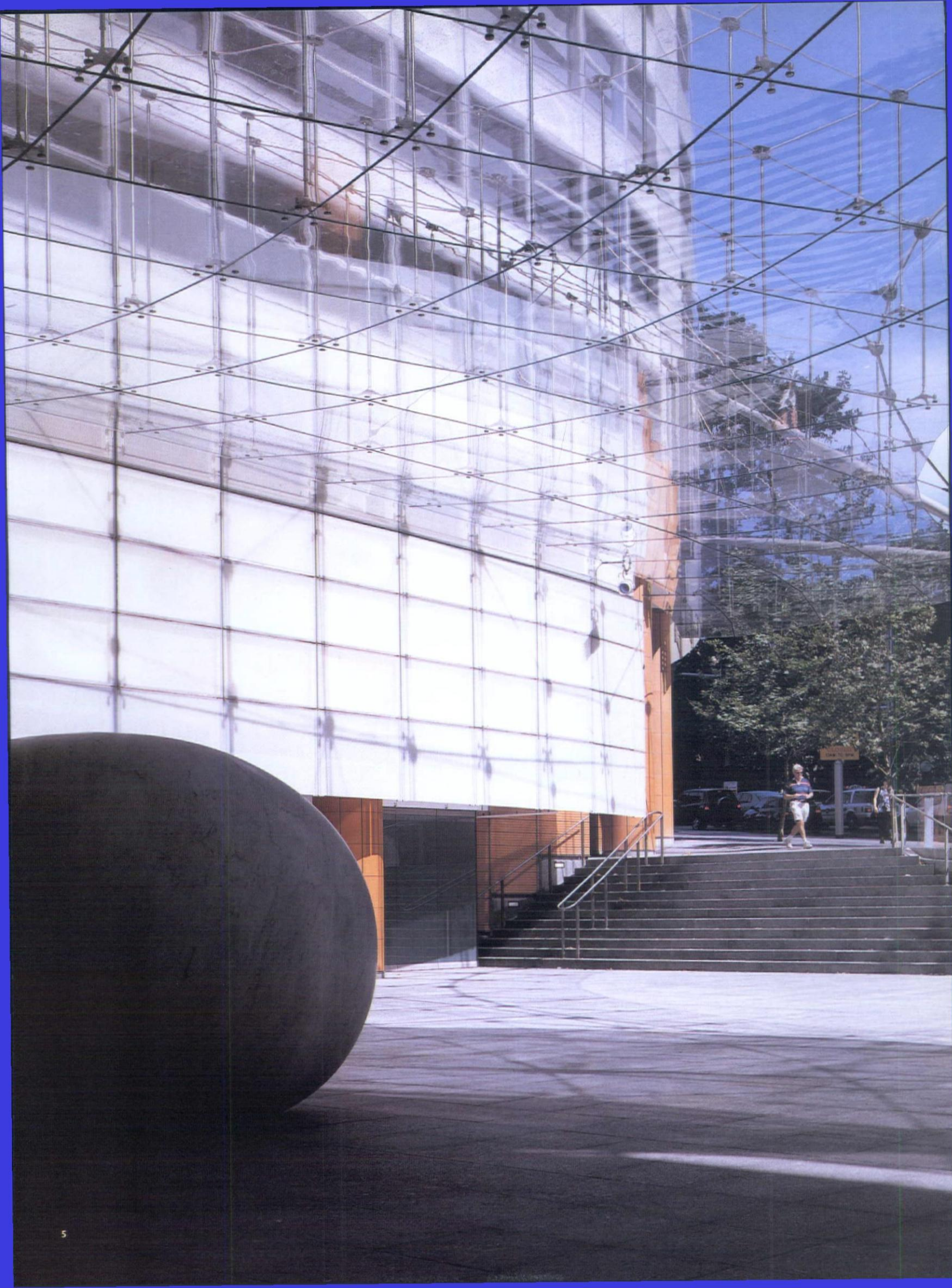
- a main entrances to tower  
b main entrances to residential block  
c tower reception  
d lobby  
e coffeeshop  
f car ramp  
g glass covered piazza



entrance level (scale approx 1:1400)

- A Macquarie Street  
B Bent Street  
C Phillip Street









**MIXED DEVELOPMENT, SYDNEY,  
AUSTRALIA**  
ARCHITECT  
**RENZO PIANO BUILDING WORKSHOP**

6 Unlike many commercial office blocks, that of the Aurora Place foyer does not swank, but is intensely civilized and comfortable. Its terracotta walls and stone floors contrast with ...  
7 ... wood of the lift lobbies and coffee shop. Reception left.

to sudden tempests, without the engineering becoming grotesquely apparent? How do you stop it sailing away, and still maintain the illusion of immateriality? And how, moreover, do you persuade all the beancounters to pay for what amounts to no more (or less) than poetry?

The answer lies in a half-dozen three-dimensionally tapering needles, up to 30m tall, roll-formed from steel plate up to 40mm thick, and capable of withstanding up to 18 tonnes lateral load. Single-point fixings for each pane of glass prevent in-plane shear in either the glass itself, or the structural silicon which is all that keeps it off the footpath. Plus it all had to be fixed in place pre-dawn. The moment the sun rose, differential movement in the steel would make the great needles 'bend like bananas', says engineer Rocco Bressi.

And then, even symbolic gestures must comply with the regulatory framework, which included in this case an absolute height limit and street-wall requirement along Macquarie Street, a sun-angle plane designed to guarantee minimum solar access to the Botanic Gardens opposite, a podium requirement on Hunter Street and a plot ratio (FSR) limit. In the end, the development

hugs the height and street-wall limits with some semblance of affection (the site being only 32m wide); the sun-angle plane was breached, but only by the sail whose translucent shadow falls anyway within an existing shadow; the podium requirement was dumped in favour of a Modernist solution with suspended glass canopy; and the FSR rule became, as is its wont, the subject of arcane and protracted horsetrading, requiring the purchase of sites, floorspace and substantial civic monetary contribution to fill the gap between the FSR limit and the sun-plane.

In fact, the site houses two new buildings which together comprise Aurora Place; a low-rise (17-storey) residential building on Macquarie Street and the commercial tower, fronting Phillip Street. Looking east over the Gardens and opera house, each apartment is designed to cross-ventilate, running east-west across the full width of the building. A shimmering wall of outsized white-glass louvres, electronically operated in banks, defines the private conservatories and maintains the Edwardian dignity of the street. Behind this, each apartment is cushioned against cognizance of mundane urban strife by further operable layers of very white,

low-iron glass. Despite the curiously old-fashioned central corridor and the lack of northern [sunny] aspect occasioned by this configuration, and despite the undeniable traffic noise when the louvres are open, Macquarie Apartments has rapidly become one of the best addresses in town, fetching up to A\$9m for the penthouses.

The commercial building, 88 Phillip Street, also out-rents the neighbours, its closest competitors being Denton Corker Marshall's Governor Phillip Tower and Kohn Pedersen Fox's Chifley Square. This coincidence between architectural and commercial quality is a new and reassuring phenomenon for Sydney, where (with the exception of Harry Seidler's towers) trash has traditionally ruled OK.

In fact, Piano has taken surprisingly well to the diamanté world of commercialism, and it to him, enabling the production of a building which, confounding sceptics, is not only dollar-perfect but qualifies, more than most, as 'real' architecture. It's not just the wintergardens, which are not actually planted but do provide meeting and breakout spaces to each floor. In a sense these were easy, being FSR-free. The foyer was more difficult.





Even the classiest architects generally get trapped by commercial culture's obsessive-compulsive attachment to the high-gloss foyer. At Aurora Place, by contrast, the foyer feels attractive but not warm, exactly, and certainly not domestic, but real. Intensely civilized, but comfortable. And special, being ordinary. This quality is part spatial (big, open and square-shouldered like an Enlightenment nave), part material (terracotta ceramic, timber and paving stone) and part acoustic (soft, soft, soft).

Commercial lore dictates a central core: civic requirements demanded multiple street entrances. In order to ensure that, within this, the foyer operated as a single, encompassing space, Piano was determined to carve a number of major holes, up to 6m wide, through the core at ground level. Given that the building was anyway eccentrically loaded (12m-deep office space on the east, compared with 10.8m on the less valuable west) and that Piano had rejected any stabilizing outriggers, this determination to insert fresh air right at the point of maximum bending moment made for an interesting structural challenge. The solution was a

raft of huge anchors, extending some 16m into the rock below the underground car parking and locking the building to mother earth.

One of the joys of the building, though, is that such gymnastics are supremely discreet. The foyer reads as a simple composition of matte planes – the vivid burnt orange of the terracotta (actually ceramic), the white, white glass, the grey-green street granite, and blond timber on the revealed surfaces within the lift core. It is sometimes tempting to characterize Piano as a poet of the object. This space reveals him as a genuine experiential craftsman.

Outside, the simplicity is comparable. Piano's now-trademark terracotta, while not exactly a traditional Sydney material (except when glazed as faience), exudes the latent energy of a fat, earth material disciplined into precision. As such it sits happily with the venerable sandstone buildings of the precinct while the unabashedly slick and glassy facade (something of a relief after all those perfunctory pseudo-punched openings) firmly establishes the building's twenty-first century credentials.

Sure the building has faults. The sail's translucency cannot always hide the junk on

the roof; the fritting on the glass, fading out to nothing around each window instead of forming a continuous screen has, close-up, a slightly bathetic santa-snow look; the internal blinds, which function in part as night-time whiteness restorers, are capable of manual control and therefore cannot be relied upon to re-form the gorgeous white ghost; and the public space around the feet of the building has yet to prove itself as a memorable civic place.

In broad terms, though, Piano's Aurora Place deserves nothing but exuberant applause, for sailing fearlessly into town, changing the rules, anchoring so prettily next to its boofy colleagues, proving a more-than-worthy successor to the handsome SOB and, above all, raising the bar once again for commercial architecture in this corner of the world. E. M. FARRELLY

#### Architects

Renzo Piano Building Workshop in collaboration with Lend Lease Design Group and Group GSA (Sydney)

#### Consultants

Ove Arup & Partners  
Lend Lease Design Group  
Taylor Thomson Whitting  
Innovarchi Pty  
Architecture Workshop

#### Photographs

Peter Cook/VIEW



If you go to a high place, the top of the London Eye for instance, or the glass attic of Herzog & De Meuron's Tate Modern, you become aware that the City contains the largest collection of second-rate commercial architecture in the world. Postwar reconstruction is for the most part shoddy and dim. The '90s produced huge behemoths with vast floor plates; they loom over their dreary neighbours, flaunting themselves with clumsy gestures and flashy stone cladding. It all makes the big Edwardian and '30s office blocks, which were thought to be so gross forty or fifty years ago, seem generous and humanly scaled.

But if you look carefully at the skyline, you will see at least one new building which does have those virtues. This is 88 Wood Street by the Richard Rogers Partnership which stands at the corner of Wood Street and London Wall (on the line of the old Roman city defences), which is one of the City's unsuccessful postwar attempts to come to terms with Modernism, with the street turned into a dual carriageway, windy podia and tall grim slabs and towers. To make matters worse, one of the '90s behemoths is next door. Across Wood Street to the east of the Rogers site is Wren's gothic tower of St Alban, the rest of which was destroyed

during the war; it is one of the very few reminders of the scale of the place before bombs and planners destroyed it.

Of course, the volume required by modern commercial development does not allow return to seventeenth-century heights – even if they were desirable. The new building rises westwards from the 10-floor block over the public entrance on Wood Street to the most westerly part which is 18 storeys high, matching its neighbours on London Wall. In the middle is a piece of 14 storeys, but each major mass is modified by an east-facing terrace, so for instance the Wood Street facade seems at first to be no more than eight floors high, with six office floors above the double-height entrance hall that runs the whole length of the building from east to west.

Ingenuity in section is elaborated in plan, in which each of the masses is articulated with deep re-entrants on the London Wall side. These, in turn, are elaborated with glass lifts, and glazed escape stairs with main steel structure emphasized in yellow. All these moves break down the scale of the north and west sides, making what is in fact a very large building seem almost like three separate ones. Cladding is big clear full-height glass panels and the storeys are articulated in

## OFFICES, CITY OF LONDON

ARCHITECT

RICHARD ROGERS PARTNERSHIP



# SCALING THE CITY

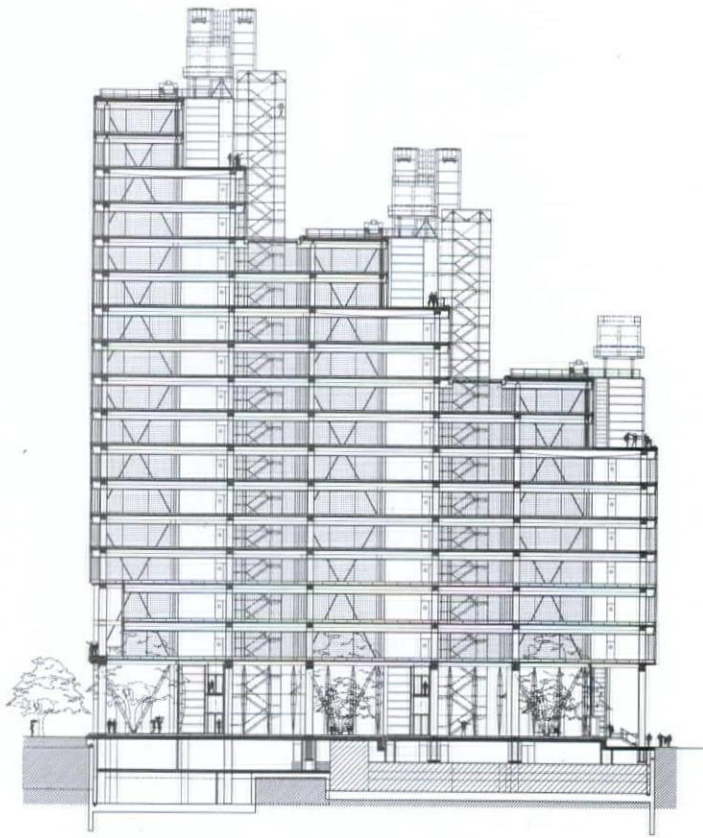
Speculative office blocks have always had problems of scale – particularly those in the City of London where most developers are blind to human concerns. Here is one which sets rather different standards.





1  
Mass is broken into three divisions to  
reduce scale of what is essentially a very  
large building. To left (south) is Foster;  
beyond, Wren's St Paul's.  
2  
Entrance front on Wood Street.  
3  
Mass is reduced in scale by carefully  
articulated detailing.





west-east section

## OFFICES, CITY OF LONDON

ARCHITECT

RICHARD ROGERS PARTNERSHIP

4

West elevation with new behemoth over London Wall, left.

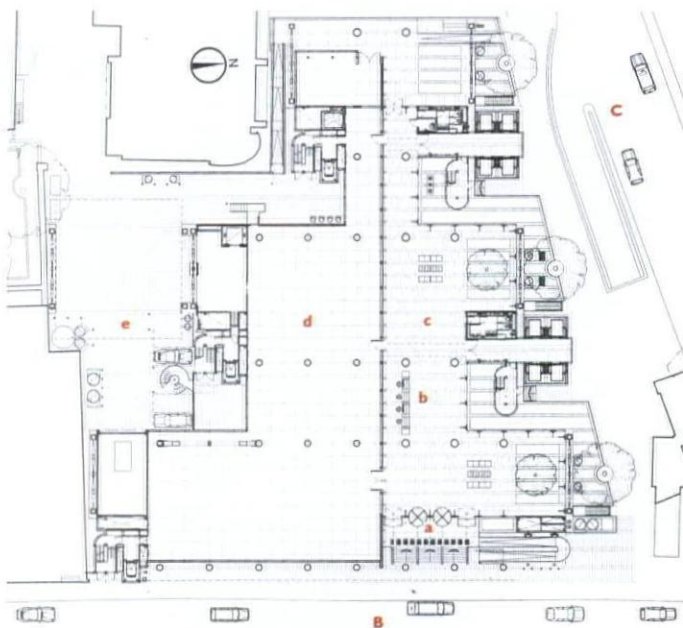
5 Behemoth, left foreground, with north face of Rogers' building beyond.

6 Terraces (do they need planting?) reduce mass of building and provide open-air spaces for offices.

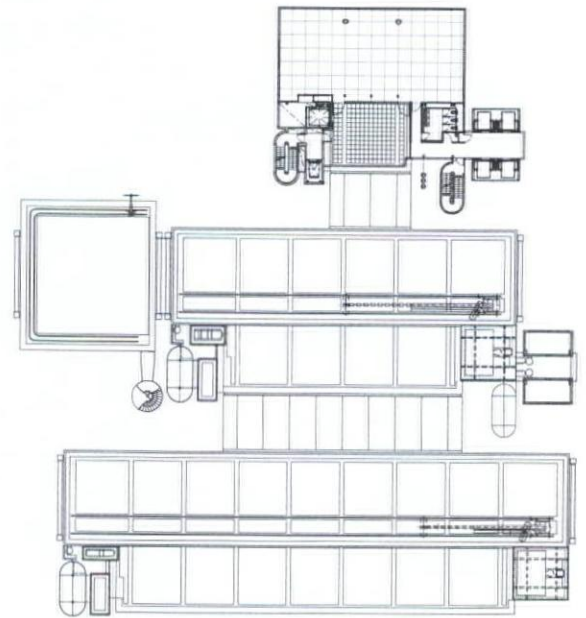
7 Services and vertical circulation are two of the key elements which set the scale.

- a entrance
- b reception
- c foyer
- d multi-purpose space
- e service entrance

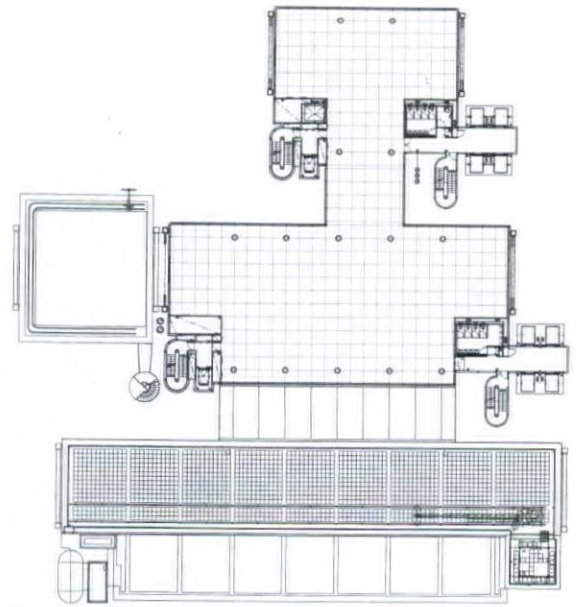
- A Wren's St Alban's tower
- B Wood Street
- C London Wall



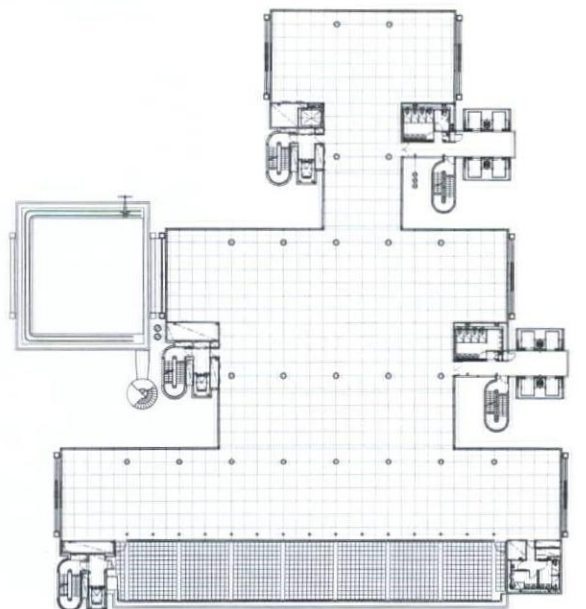
street level (scale approx 1:1250)



level 16 (offices)

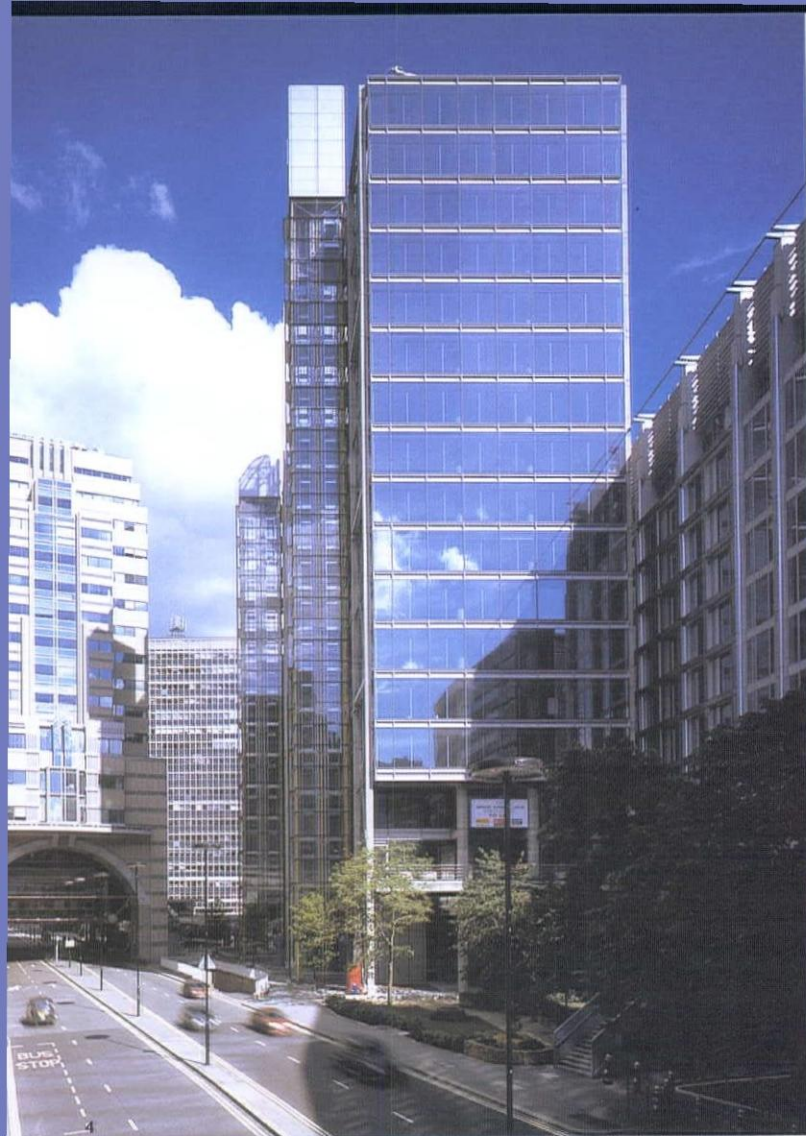


level 10 (offices)

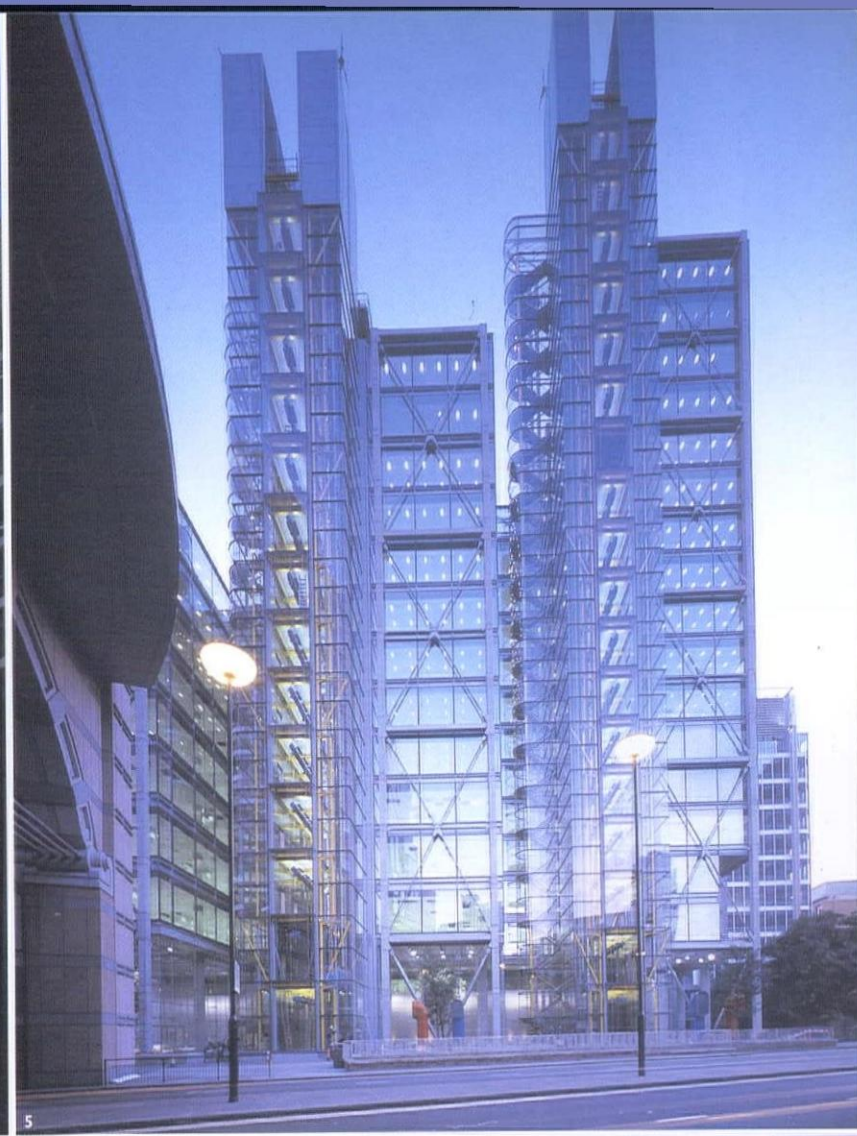


level 8 (offices)

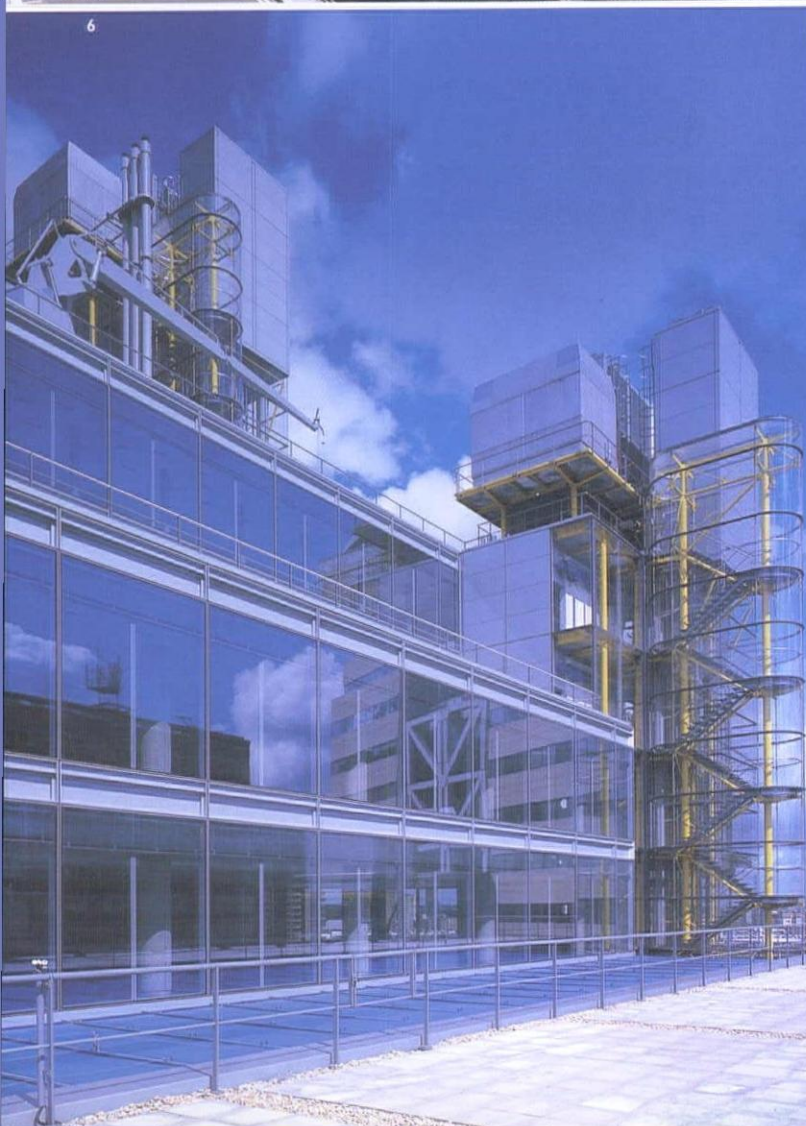




6



5



7



## OFFICES, CITY OF LONDON

ARCHITECT

RICHARD ROGERS PARTNERSHIP

### Architect

Richard Rogers Partnership, London

### Project team

Richard Rogers, Marco Goldschmied, Graham Stirk, Andrew Morris, Amo Kalsi, Russell Gilchrist, Stig Larsen, Stuart Forbes, Mark Hallet, Andy Young, Sophie Nguyen, Jenny Jones, Havinder Gabhari, Roo Lam Lau, Charles Malloy, Beth Margois, Amarjit Tamber, Andrew Partridge, Jane Donnelly, Sam Masters, Robert Torday, Julie Parker, Annette Main, Phil Bernard, Francesco Draisci, Mike Fairbrass, Jackie Hands

### Structural and services engineer

Ove Arup & Partners

### Landscape architect

Edward Hutchinson

### Photographs

All photographs by Katsuhisa Kida apart from no 11 which is by Sector Light

groups of four vertically by expressing the concrete frame and its diagonal steel bracing. The glass panels are in fact triple-glazed units, with blinds in the wider cavity automatically activated to cut down insolation. The strategy of a deeply fretted plan and masses of glass may seem peculiar, but the intention is to introduce as much daylight as can be into the necessarily large dealing floors, and offer as many people as possible views out over the City. The architects argue that the approach reduces the need for artificial lighting, which in conjunction with the blinds, significantly cuts down cooling loads compared to a conventional curtain walled slab block.

Office floors are indeed more full of daylight than usual in such large areas, though obviously in the middle of the building, artificial light is needed all the time, particularly where the south wall is hard up against the new next door building (not one of Foster's best). Floors can be arranged in any configuration, with single plates for dealing floors as big as 2230 sq m in the largest parts of the plan. The most impressive space is of course the long tall entrance hall that you enter from Wood Street through a long row of circular concrete columns. On the left (south) side is a polished plaster wall which divides the

floor plate in two, with the southern side occupied by general purpose space. To the north, the glass onto London Wall moves in and out, following the massing of the upper floors. The whole volume is large and airy, with external landscaping related to planting inside on the north side, making the place seem larger and masking the traffic on the dual carriageway. At the west end, you look out on a little garden, which is supposed to be on the site of Shakespeare's London lodgings.

No 88 is undoubtedly one of the most distinguished office buildings constructed in the City of London since the War. It could not have been made without an enlightened developer, the Japanese company Daiwa, who initially wanted it as their own European headquarters. They held an invited competition in the early '90s, which was won by the Rogers practice. After many vicissitudes, including total stop during the London property slump, it was partly redesigned and completed last year. It is now no longer Daiwa's headquarters, but is being successfully let off to a variety of other companies. But the original design intentions remain and have not been compromised, nor has the client's ideal of achieving a landmark that would be 'light, airy and transparent'.

P.D.



8,9  
Entrance hall in which interior vegetation on north side reflects small gardens on London Wall.

10

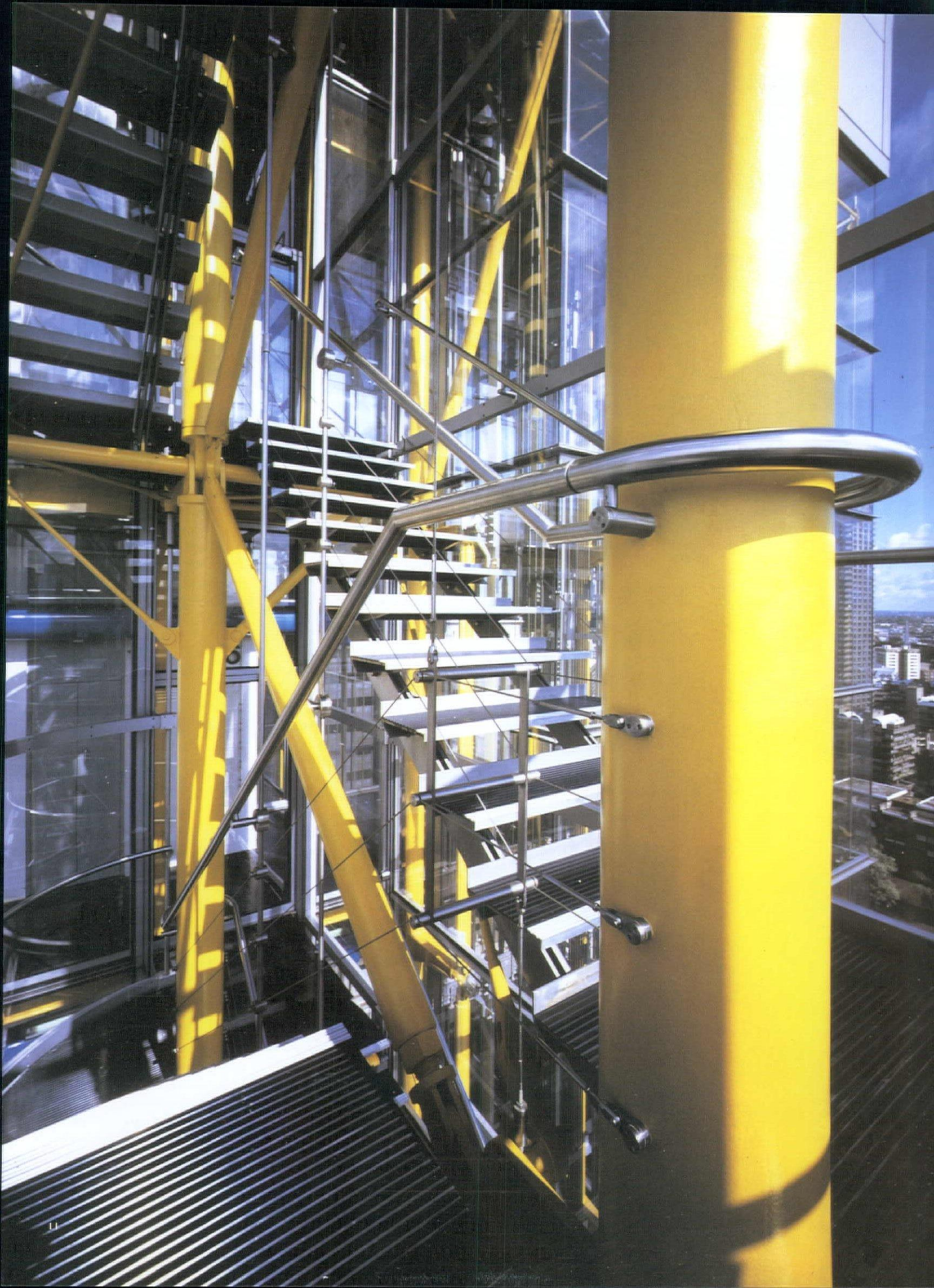
Office space.

11

Detail of escape stairs which do so much for scale of exterior.











**DEALING OFFICES,  
HAMBURG, GERMANY**  
ARCHITECT  
**ALSO & STÖRMER**

- 1 The new offices form part of Hamburg's urban grain.
- 2 Shops at ground level add life and diversity to the streetscape.
- 3 Detail of the central courtyard.
- 4 Concertina facade recalls Fritz Höger's Baltic Expressionism.

## BALTIC TRADER

**Slotted into a canalside site, these dealing offices for the Hamburg-based Vereinsbank add to the life of the city.**

Enthusiasm for IT has focused on means of communication regardless of location. Presumption that every deal can be negotiated from a call centre in a green field or desert, divorced from environment and alienated from society, ignores the tradition of face to face confrontation, and the art of contractual agreement, which have been cornerstones of civilization since human settlements were established with forums, markets and souks. The Vereinsbank Hamburg headquarters for international stock market dealing exemplifies this modern dichotomy.

The bank prides itself on knowledge of investment customers' concerns and discreet personal contact and service. Unlike many other financial institutions, it decided to remain in Hamburg and not follow the rush to Frankfurt. At the same time, expansion and modernization of its world-wide electronic network meant constructing a new purpose-built headquarters. Theoretically this could have operated from a rural setting anywhere in Germany, but the Vereinsbank has been based in Hamburg since 1856 and, while Berlin's exchange specializes in Eastern European and Stuttgart in American shares, Hamburg has specialist knowledge of the Baltic nations. Reinforcing these historical roots were strategic and logistic factors. In the increasingly fierce competition for qualified staff, a vibrant city

location such as Hamburg is an obvious advantage.

This demonstration of the bank's loyalty has enhanced its reputation as a reliable Hanseatic institution, partly compensating for difficulties encountered in developing an urban infill, as opposed to a greenfield site. In Neuer Wall the bank has a physical presence, close to City Hall, the stock market building and other manifestations of commercial power. Also & Störmer won an architectural competition in 1995 for the site sandwiched between historical eighteenth- and nineteenth-century commercial buildings and post-war Modernist developments of high value offices and shops. The Neuer Wall provides a total of 11 000 sqm of usable space, including 6000 sqm for 280 bank employees on seven floors, and two street level shops separated by a pedestrian arcade cutting through the centre of the site between the street and canal frontage. Eventually, a new pedestrian footbridge over the Bleichenfleet canal will complete the composition.

While obediently following the historical street plan, the project has managed to insert a welcome dash of nonconformity into its conservative Hanseatic setting. The concertina zigzag of vertical glazing is made up of alternately fixed panes of smooth green glass, and blue openable panels with a flecked glass louvre system for manually operated sun shading. As you walk down





ligneroset



**DEALING OFFICES,  
HAMBURG, GERMANY**  
ARCHITECT  
**ALSOP & STÖRMER**

the street, the facade changes colour and appearance according to the angle of view. The folded facade has an antecedent in Expressionist architecture. Fritz Höger used the technique in brick on his 1927 Hamburg-Wandsbek cigarette factory.

The bank's discreet double-height entrance foyer is tucked into a corner on the fleet side of the building, at the end of the arcade. A security turnstile leads to the lift. Also facing the water is a small and very basic staff canteen reached by a glazed bridge that crosses the arcade at first floor level. In the absence of a proper in-house restaurant, the bank's well paid employees are encouraged to mix with the general populace and make a meaningful contribution to the inner city economy.

On the open plan second floor is the dealing room, which covers the full area of the site. The Vereinsbank is one of the first to use Siemens latest telephone system, operated by a touch screen which flips up from the work table. Blond wood, blue and grey carpet and paintwork with a flat ceiling offer a neutral, almost somnambulant atmosphere for rows of

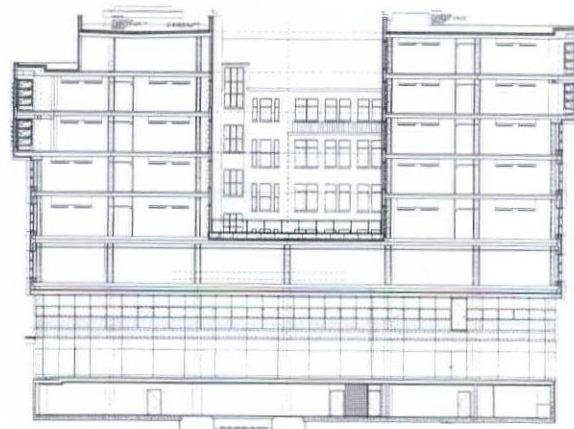
5  
Open plan dealing area on the second floor.

computer screens on blue laminate work tops. Head-sets and the low partitions between the double-sided dealing tables form separate sections to ensure customer privacy.

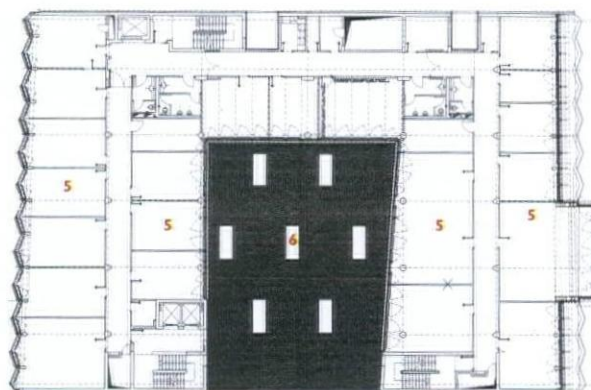
Floors three to seven form a U-plan, partly enclosing a third floor roof terrace big enough for open air receptions. As well as offering a private garden view from all offices, this plan allows every cellular office natural light and ventilation with openable windows. Three fire-protected stairwells in the building provide the opportunity for smaller rentable units. Energy-saving measures are the norm. An exposed concrete soffit without suspended ceilings allows the time-lagged release of heat, while sun-shades, tinted glazing, and a night cooling system avoid overheating. All component materials were checked by a building biologist for their environmental friendliness.

LAYLA DAWSON

**Architect**  
Alsop & Störmer, London/Hamburg  
**Services engineer**  
Ridder & Meyn  
**Project management**  
Harms & Partner  
**Photographs**  
1, 5, Bernadette Grimmerstein  
3, Yvonne Strachwitz; 4, Barbara Balden

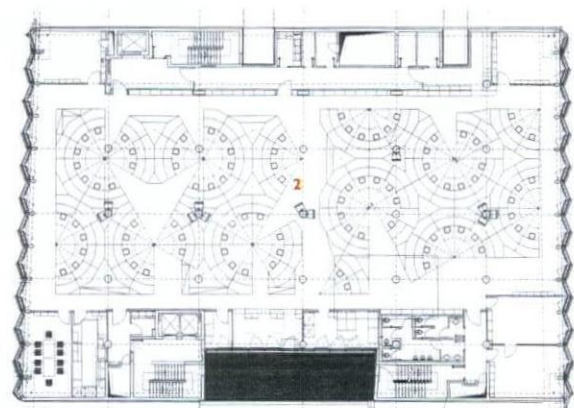


longitudinal section

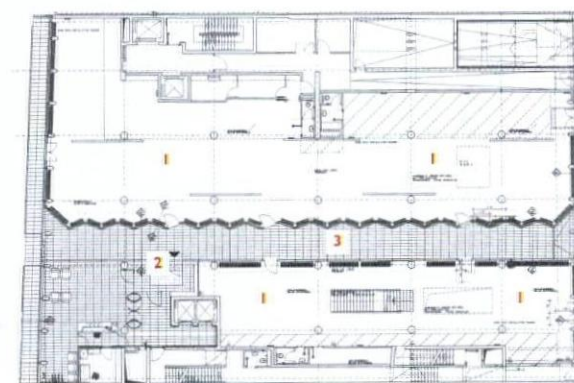


fifth floor plan

- |                       |                |
|-----------------------|----------------|
| 1 shops               | 4 dealing room |
| 2 entrance to offices | 5 offices      |
| 3 pedestrian arcade   | 6 courtyard    |



second floor plan



ground floor plan (scale approx 1:600)





**LOCAL GOVERNMENT  
OFFICES, DUBLIN, IRELAND**  
ARCHITECT  
**BUCHOLZ MCEVOY  
ARCHITECTS**

Rapid development has resulted in the physical growth of Ireland's capital far past its twentieth-century boundaries and in a bureaucratic structure establishing three new administrative counties within County Dublin. To the north of the city centre, Fingal stretches from the motorway and IT landscape around Dublin Airport up against the fringes of the Irish Sea to the rich farmlands of Meath and Louth. Swords is the designated county seat and it is here, facing the low, robust bailiwick of a Norman castle, that the young American-Irish firm Bucholz McEvoy has built Fingal County Hall.

To the authorities' credit, all three county halls are distinguished designs won through competition (the others being South County Dublin, at Tallaght, by Gilroy McMahon and Dun Laoghaire Rathdown by McCullough Mulvin with Robinson Keefe Devane). With impressive academic and professional backgrounds, Merritt Bucholz and Karen McEvoy had recently moved from New York to Dublin when they won the Fingal competition in 1995. Their proposal retained some mature oaks and a superb Himalayan cedar gracing the site, then cast a hypothetical arc about the castle



## CIVIC SPECTACLE

Combining an enlightened sensitivity as to how things are made, allied to an innate feel for materials, these council offices have great civic presence.

1  
The curved sweep of the glazed wall presents an open face to Fingal's new local government offices.

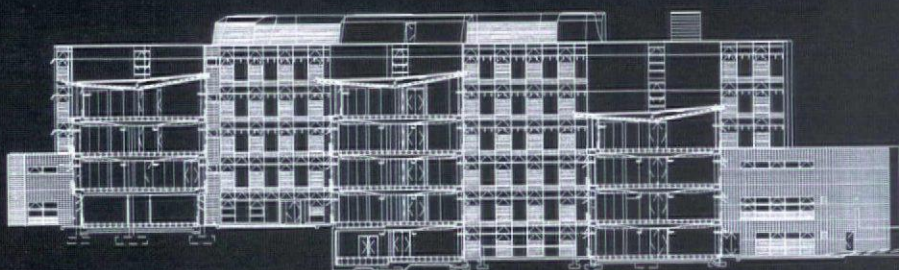
2  
The transparency of the wall is almost like an X-ray revealing the public areas of the building.



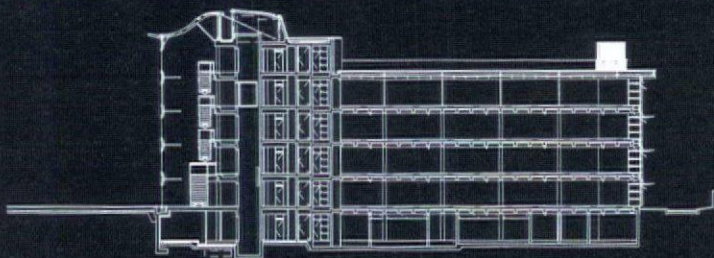


LOCAL GOVERNMENT OFFICES,  
DUBLIN, IRELAND  
ARCHITECT  
BUCHOLZ MCEVOY ARCHITECTS

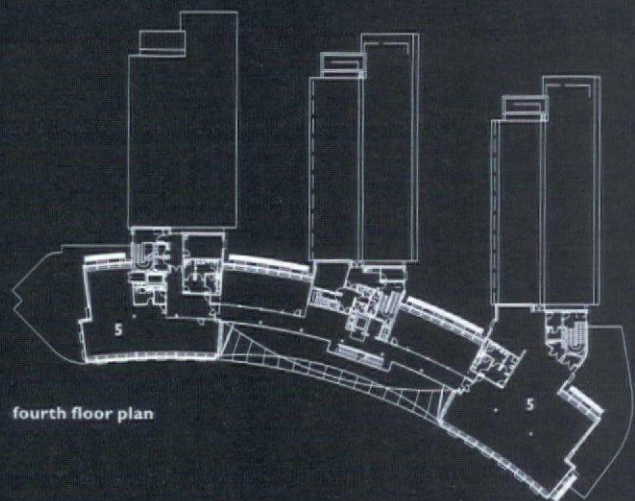
3  
Imparting a sense of formal and functional drama, the core atrium is enclosed by a fastidiously detailed glass wall.



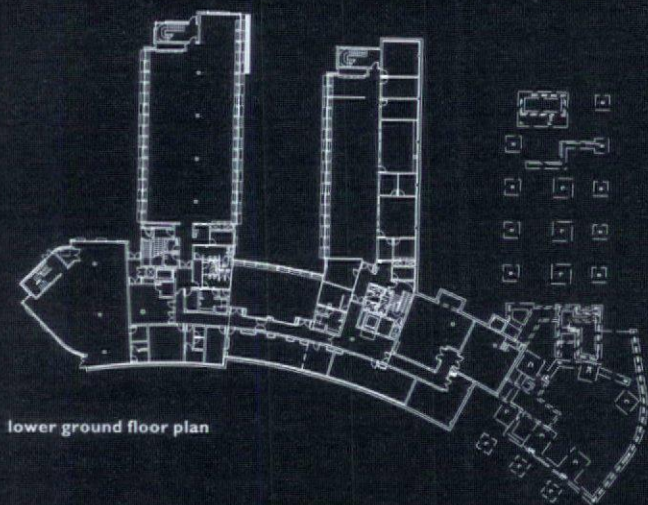
cross section through offices



section through atrium and office wing

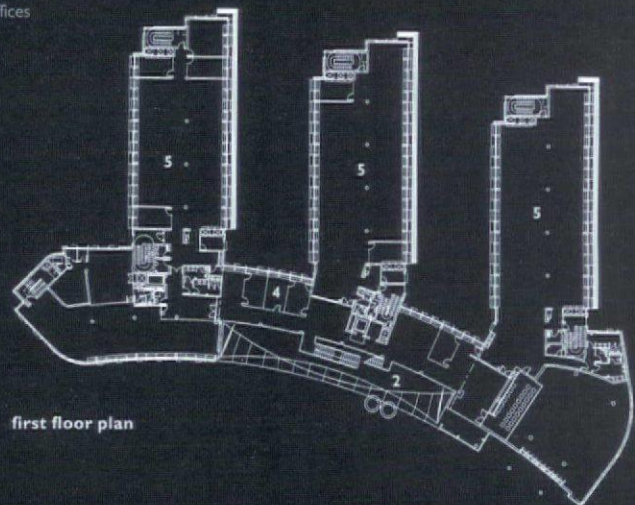


fourth floor plan



lower ground floor plan

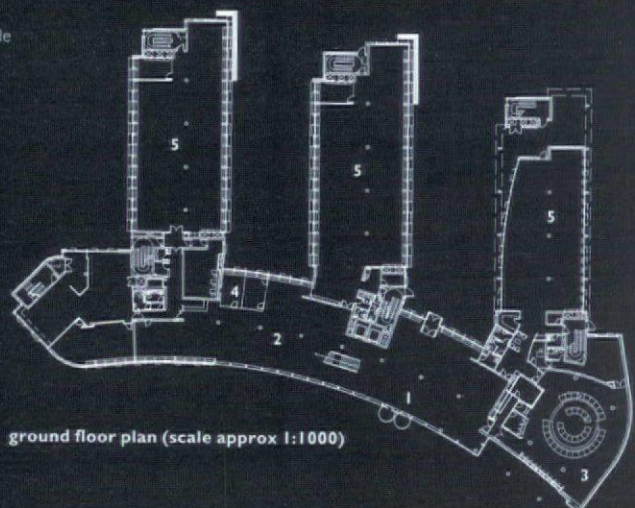
- 1 entrance
- 2 atrium
- 3 council chamber
- 4 cellular offices
- 5 open plan offices



first floor plan



- A Swords Castle
- B new offices
- C parking
- D Main Street



ground floor plan (scale approx 1:1000)







4

Long office wings are attached to the curved main spine.

5

The handsome and dignified main council chamber.

6

The building is characterized by its literal and metaphorical transparency.

7

Typical office space.

grounds. The principal fragment of this arc is now a screen to civic and office functions behind.

As you walk or drive down Swords' busy main street today, you see the castle walls with some public and private houses still nestling against them. To the right, trees define the flowing, vertical street edge. The ground rises slightly and is broken into with geometric cuts that lead past the tree trunks into a tall, curving lobby protected from the elements by only a thin hanging membrane of glass. This is very much how the architects originally envisaged the public representation of Fingal County Hall, the screen acting almost as an X-ray into the workings of local bureaucracy and, in the opposite direction, allowing views through and over the trees to Swords Castle and beyond.

The central glass wall – really a diaphanous curtain to the curving atrium – and the canopy roof above were developed by Bucholz McEvoy in direct collaboration with RFR in Paris. Allowing for movement of light

and air, the roof curves up away from the glass facade; its soffit is clad in birch ply, its exterior in copper. The projecting flanks to either side – with the council chamber and a semi-basement studio intended as a crèche – are of warm terracotta tiles and glass shaded by exterior glass-finned boxes. Facing west/north-west, the central glass facade is made entirely of single-glazed sheets measuring 3.5m across by either 2.26 or 1.13m high. Upper segments have a light ceramic frit. The 36m long sheer wall is suspended from the roof and held in place by twin 32mm diameter cables looping out into the atrium from the concave building proper. These overlap a single 25mm diameter cable that curves inwards from both extremities of the facade's length. As the principal concrete frame has expansion joints at these two points, the glass and stainless-steel insertion is connected back in each corner of the atrium by individual sets of angled props and tie rods. The team designed every connection resulting in an

intricate, trapeze-like system of cables and laminated oak spars.

This architecture is clearly about the expression of components: the large fragment of arc at the urban scale, the subsidiary wings (garden pavilions or returns behind the civic facade), and each element of construction as independent, coordinated modules. Office ceilings are made of thin, ribbed concrete slabs painted white and curving towards the natural light. Top floors have gull-wing roofs creating studio-like spaces for the architecture, traffic and planning departments. Uplighter trays are accommodated in a linear reveal along the mid-soffit spine and in the curtain wall transom.

The building was designed around certain simple ecological principles. Services have been managed so that there is a pleasing lack of clutter. The entire building relies on natural ventilation. The atrium lobby acts as a stack, with horizontal vents at floor and ceiling. Lavatories and photocopying machines are housed in knuckles between the

## LOCAL GOVERNMENT OFFICES, DUBLIN, IRELAND

ARCHITECT

BUCHOLZ MCEVOY ARCHITECTS







office returns and the arc, and private offices are shepherded to the far end of the returns, thus allowing for cross ventilation. Upper openings in the north and south facades are operated electrically, those at desk level by hand. The three returns have clear and dove grey glass panels on their north elevations; clear glass, terracotta tiles and deeper external light shelves towards the south. Both facades have multi-coloured vertical air vents. These colours, plus views of abundant foliage and often rather grey skies, give the project a more vibrant spectrum than many comparable buildings. The council chamber is arranged about an elegant glass-topped circle of tables, with oak fins to control views to the forecourt.

From the top floors of the lobby, you see how the architects have gradated that surface with gravel, stone and ivy so that the urban realm really does flow into the bureaucratic. RAYMUND RYAN

**Architect**

Bucholz McEvoy Architects, Dublin

**Associate architects**

BDP Dublin

**Project team**

Karen McEvoy, Merritt Bucholz, Donal Friel, Mary McDonald, Jim Luke, Chris Lloyd, Sabine Klinger, Deirdre Prince, Richard Byrne, Graham Perrie, Gerard O'Sullivan, Mary Louise Kelly, Colin Chestnut, Elaine Butler, Denise Germane, Melissa Lewis, Pamela Sams, John Fitzgerald

**Structural engineer**

Arup Consulting Engineers

**Mechanical and electrical engineers**

BDP

**Glass facade**

RFR

**Photographs**

Michael Moran







Banks used to be quite simple, places – ponderous, heavy and institutional, based on the notion that physical solidity equated reassuring permanence and security. This is changing. The recent growth of virtual banking has caused a major restructuring not only in how business is transacted, but also in the form of banks themselves.

The daunting banking palazzos of history, with their Byzantinely hierarchical layers of staff are now being rationalized and replaced by smaller operations, with reduced face to face contact. Yet although it is widely predicted that banks in the physical sense may become obsolete, as a result of people being able to bank on-line, there

will surely still be a need for places to conduct business in person – the original basis of all banking and exchange.

The new Volksbank in Borken, a small German country town near the Dutch border, addresses these changes of function and image and translates them into built form. Contradictory requirements of openness and privacy are synthesized into what architects Bolles Wilson describe as an 'umbrella of discretion'. The site lies within walking distance of the town centre. The new building is a low slung longitudinal bar diffused and eroded at its west end by a tall glazed banking hall. Dramatically scaled and delicately transparent, this opens on to the street front as the bank's permeable, public face. Within the hall is a separate space for automatic transaction machines (ATMs), as most of the cash dealings in the bank are now automated. Divided by a 6m high sliding wall from the main space, the ATM hall is open 24 hours a day. The height of the banking hall gradually steps down from three to one storeys, marking the transition from imposing public space to more private hermetic domains.

Above the banking hall is a brick-clad volume containing cellular conference rooms and

offices which require a greater degree of seclusion. These also step down along the building's length. The two diverse elements of offices and banking hall are precisely dovetailed together like a piece of cabinetry, the cloistered private offices suspended over a zone of openness and transparency.

In Borken's messily vital urban context of supermarkets, small houses and traffic roundabouts, the bank's simple Euclidean form is a reassuringly calm, rooted presence. A sober yet dignified palette of materials is applied with sensitivity and restraint. The solid upper volume is executed in a warm chocolate brown brick, with crisp orthogonal openings punched into its flanks. The clear glass skin of the banking and ATM hall is held in place by slim vertical mullions, emphasizing its sleek, diaphanous quality.

The building unfolds sequentially. Roving bank staff mingle with customers at standing tables in the central hall, or if more privacy is required, they can withdraw to glazed cubicles lining the edges of the hall. Deeper into the bank where the ceiling begins to step down, a new vertical vista opens up. A central toplit staircase leads to the offices, meeting rooms and rooftop café on the upper floors. Elegantly detailed

## BANK, BORKEN, GERMANY

ARCHITECT  
BOLLES + WILSON

# BANK BALANCE

This new bank in Borken is a thoughtful response to recent changes in banking practice, evolving from the palazzo model to modern, streamlined institutions.



- 1 Bank is a long, low slung volume with a glazed banking hall at its west end.
- 2 Delicately transparent, the banking hall forms a permeable, public face.
- 3 An upper brick-clad volume of offices sits on the glazed base.
- 4 The tall, luminous space of the ATM hall, which can be sealed off from the main banking hall for 24 hour use.









and lined with panels of polished cherry, the stair is like a piece of taut, geometric sculpture

This stair is supported by a central column sheathed in translucent glass panels. The column is internally lit to exude a soft radiance, so it becomes both structural and ephemeral like money itself. A similarly detailed column is positioned at the corner of the building beside the glass ATM hall. Glowing seductively, like a streamlined totem pole, it forms a

mesmerizing landmark for the next phase of the banking evolution. CLAUDIA KUGEL

**Architect**

Bolles + Wilson, Münster, Germany

**Project team**

Udo Arntzen, Dietmar Berner, Anne Elshof, Peter Focke, Andreas Kimmel, André Pannenbäcker, Bettina Schürkamp, Ruth Thörner, Thomas Walcher

**Structural engineers**

Möller + Schweer; M. Knobloch

**Services engineer**

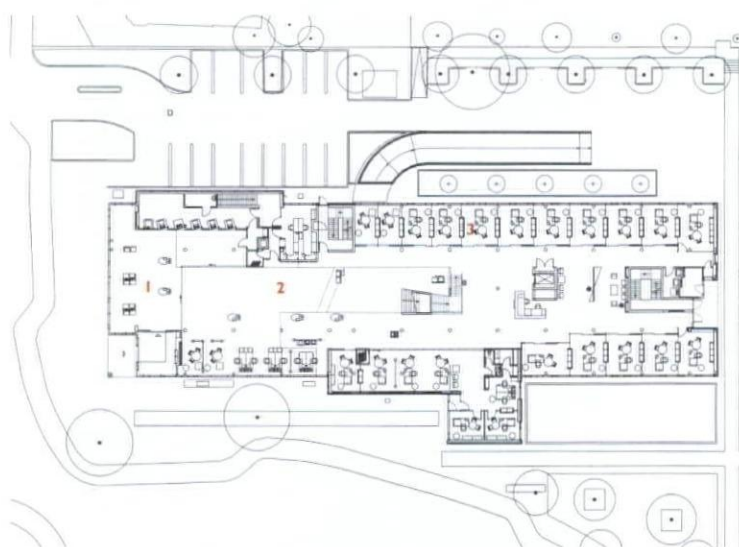
Hans Rehms; Kruck

**Landscape architects**

Rheims + Partner

**Photographer**

Christian Richters



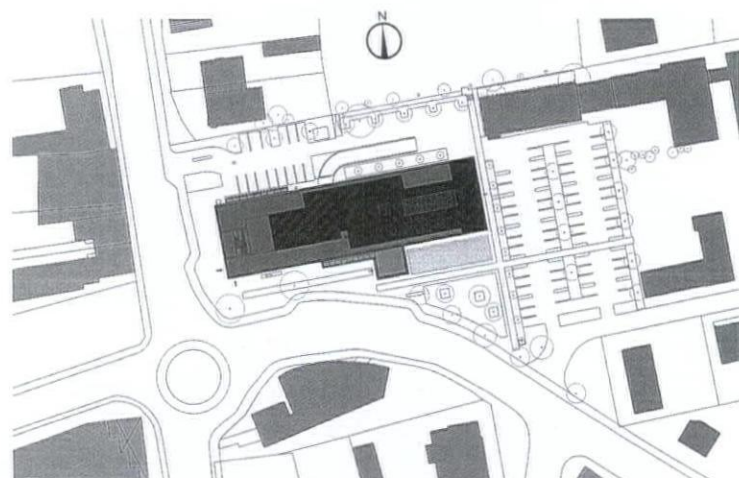
ground floor plan (scale approx 1:700)

**BANK, BORKEN, GERMANY**

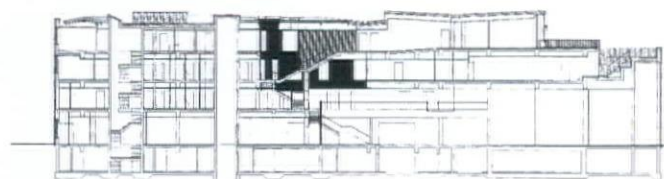
ARCHITECT

**BOLLES + WILSON**

- 1 ATM hall
- 2 banking hall
- 3 private interview rooms
- 4 offices
- 5 banking hall below



site plan



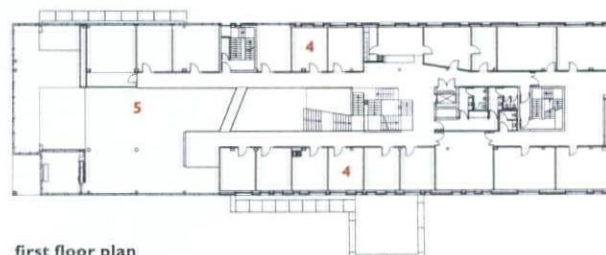
longitudinal section



third floor plan



second floor plan



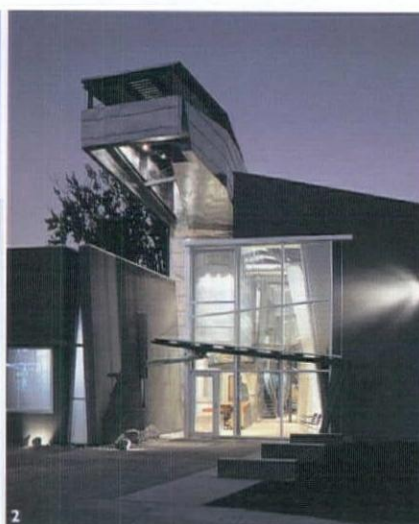
first floor plan





5 Part of the main banking hall, with private offices around its edge.  
6 Elegantly detailed sculptural staircase with its translucent central column.





- 1 Back of the building with, from left to right, conference room windows, glass void, metal clad library and terrace, and spec offices.
- 2 Office entrance and oversailing canopy.
- 3 Entrance void, inclined metal studded polyurethane wall to left, reception area to right.
- 4 Entrance and reception under metal clad structure. Conference room glimpsed at back.

**OFFICES, OMAHA, NEBRASKA, USA**  
 ARCHITECT  
**RANDY BROWN ARCHITECTS**

## OMAHA VICTORY

While responding to the landscape, design of new offices on the outskirts of Omaha, Nebraska expresses the adventurous spirit of its occupants.



Randy Brown Architects' design of offices in Omaha, Nebraska, continues the practice's interest in breaking down the banal and stereotypical. As before, in the design of Brown's own house and studio (AR November 1997), and in that of offices for a building contractor (AR May 1999), the practice has employed vigorous constructivist means to shape the scheme to site and purpose. Like its precursors, the building has a serendipitous quality with angled planes, strange asymmetries and conjunctions contrived out of familiar industrial materials such as birch ply, lengths of Glulam, translucent polycarbonate, silky stainless steel and corrugated metal.

The triangular site on the edge of Omaha forms one corner of a junction between two arterial streets. Its remaining side is bordered by a meandering ravine lined with trees. Close collaboration between clients, architects and site workers was a feature of the project; and after discussion it was decided that the various departments of the firm should be housed in two buildings, rather than one, and the spaces between them considered as part of the overall design of the site.

The first phase of the scheme, now completed, stands beside the ravine at the south-west

entrance to the site and eventually will face its companion built within the site's curved apex across a service road. The building running north-south also falls into two parts: speculative offices still to be occupied on the north side, and purpose-built chambers for the client on the south. These architects' dislike of the featureless box – coinciding with their clients' desire for 'stimulating offices' that would express the spirit of a dynamic innovative practice – has resulted in an exotic presence in a familiar suburban landscape of houses, shopping centres and petrol stations.

Looking at the plan you can see how the the southern end has been twisted away from the main mass of the building, fractured and split by a gash running from west to east, its irregular progress through the building evidently inspired by the geological features of the ravine. Throughout design of these law offices the slight deformations from the orthogonal of horizontal and vertical planes, and their meshings, have produced extraordinary volumetric jugglings. Externally the split is indicated by a metal clad structure that encloses a first floor library and conference room before turning into a jutting canopy to emphasize the drama of entrance on the west.









## OFFICES, OMAHA, NEBRASKA, USA

ARCHITECT

**RANDY BROWN ARCHITECTS**

5

Partitions of wooden framed polycarbonate and screen of corrugated metal on upper floor.

6

Upper gallery and bridge with patterns of light and shadow cast by delicate balustrading and angled structure.

7

Ground floor office.

8

From upper office to library across bridge.

Metal cladding taken inside the building and down the south face of the structure defines one side of a soaring luminous void spanned at first floor level by a void and illuminated by a glass roof and by glazed walls at either end. This passageway contracting and expanding, bristling with detached bits of structure, overhead ducting and planes – at times metallic, at others translucent or massively opaque – takes you in an Alice in Wonderland progression from reception (underneath the metal wedge) past offices and kitchen to stairs and ground floor conference room.

As in previous schemes, spaces bleed one into another vertically and horizontally so they become ambiguous. A mezzanine gallery on the south side breaches the upper confines of the double-height conference room which is barely divided from the corridor by a double-height glass wall. Division and surface

are further dissolved by a skewed glass slot and the large east-facing window that leans inward, its distorted angles framing trees around the ravine. Elsewhere, on the first floor, delicate translucent walls of wooden framed polycarbonate and screen of corrugated metal have a fleeting, just-knocked-together quality.

But what appears haphazard is deliberately composed as you realize when you examine the sculptural nature of the confection and the careful juxtaposition of materials. Delight in serendipity and the occasional sense of displacement no doubt does much to dispel the complacency traditionally ascribed to lawyers.

VIOLET GORE

### Architect

Randy Brown Architects

### Project architects

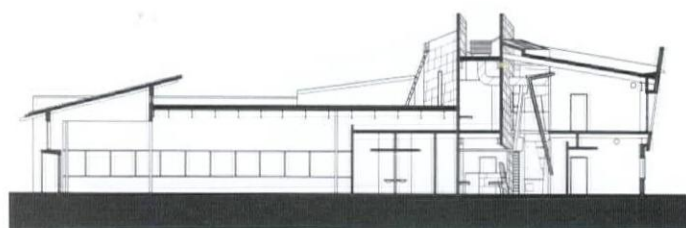
Randy Brown, Matthew Kruntorad, Ken Koense, Geoff DeOld, Kimberly Brown, Chris Petrick, Tom Alisma, Tom Prinz

### Contractor

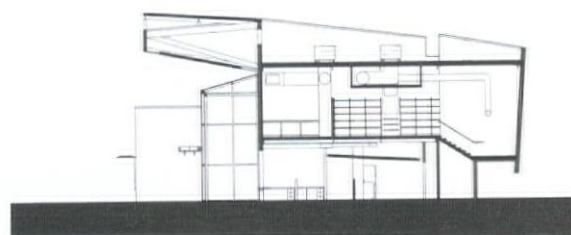
John Luce Company

### Photographs

Farshid Assassi



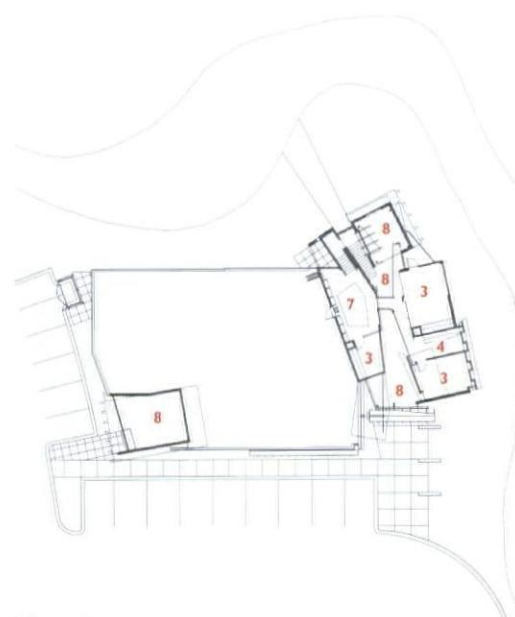
long section



cross section

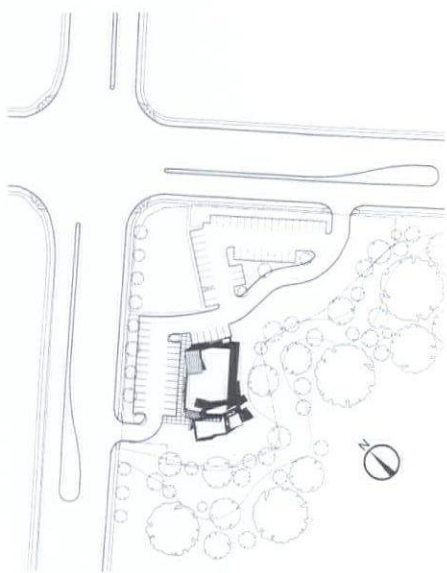


- 1 entrance
- 2 reception
- 3 office
- 4 secretarial
- 5 conference room
- 6 work/kitchen
- 7 library
- 8 void
- 9 lavatory



first floor plan





site plan



7



8



Ted Baker (the company) is known for its witty, insouciant take on fashion and its new offices in London reflect the same iconoclastic spirit. Perhaps most iconoclastically of all, Ted Baker (the person) does not actually exist, but has been willed into life by collective imagination to act as a guiding presence and creative influence. 'What would Ted think?' is the corporate mantra.

The company needed new premises that combined a conventional mixture of offices, meeting rooms, showrooms and a staff canteen, but these also had to reflect the underlying informal philosophy. An old post office building on the edge of Regent's Canal in north London promised the required amount of space, but both the raw material and setting were uninspiring. Built in the early 1980s, the four-storey industrial unit was arranged around a bleak triangular courtyard, joining an array of similarly dull sheds in a dreary Camden backstreet.

Matthew Priestman was commissioned to remodel the

Ugly Brown Building (as it has come to be known, in the argot of taxi drivers), a task achieved with some skill and flair. The exterior remains largely unaltered (the brown cladding and red window frames are now almost ironically fashionable again), but the inside has been remarkably transformed. Entry is audaciously signposted by a huge billboard of a lobster, an instant graphic landmark in the featureless street. The route to the upper levels is animated by a linear history of Ted Baker graphics and small products. Existing industrial lift cages grind up to the reception space on the third floor, where the scope of Priestman's new interventions is spectacularly revealed.

The hitherto inaccessible central courtyard has been covered by a steel-framed, clear glass roof adding space and light in one bold, economical sweep. Configured around the revived triangular courtyard, second and third floors are conceived as large open plan areas where various events take place – showrooms, workstations,

formal and informal meeting rooms. At the apex of the triangle, a tautly detailed stair leads down from the office level to the lower floor. The staff canteen occupies the centre of the courtyard, surrounded by banks of showrooms enclosed by sliding canvas and stainless-steel screens. On the elevation overlooking the canal, the original cladding has been removed and replaced with glazed sliding doors that lead on to cedar-clad balconies. In an essentially hermetic, inward-looking environment, this provides some welcome contact with the outside world.

Throughout, the treatment is vigorously broad brush, expressing the industrial spirit of the building. The original interior has been stripped back to its bare shell and the exposed structure sandblasted. Finishes are colourful, inventive and robustly functional – the existing concrete floor screed has simply been sealed, with traces of the original floor surfaces and partitions still faintly visible. Desks are large linoleum and

walnut-clad tables with a bespoke modular storage system. Services are routed from the ceiling or perimeter walls, so that work spaces can be adapted to individual needs, giving increased flexibility. Cellular external meeting rooms are each lent a theatrical character by judicious use of props and photographic murals. Internal meeting spaces are housed in a series of sleek pods. Quirky, yet with an inventive approach to materials and space handling, Priestman's makeover cleverly crystallizes what makes the company tick. What would Ted think? We think he'd like it. C. S.

#### Architect

Matthew Priestman Architects, London

#### Project team

Matthew Priestman, Samson Adjei, Anne-Marie Diderich, Mick Haley, Nick Hill, Graham Williams, Roland Woolner

#### Project manager

BDG McColl

#### Structural engineer

Maurice Baguley & Partners

#### Services engineer

BDG McColl

#### Lighting design

Equation Lighting

#### Photographs

David Glandorge

## FASHION SENSE

Witty and inventive, these offices for a fashion design company creatively recolonize a redundant industrial building.







## OFFICES, LONDON

ARCHITECT

**MATTHEW PRIESTMAN**

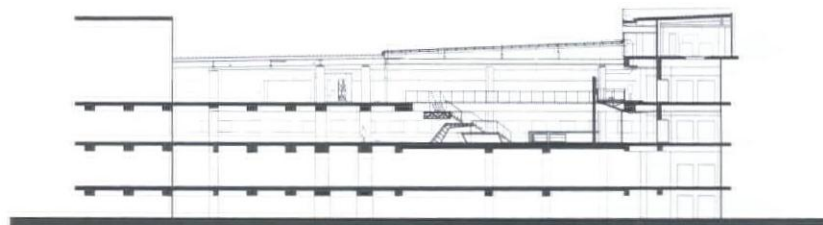
**ARCHITECTS**

1 Lobster billboard marks entrance, providing instant graphic identity.

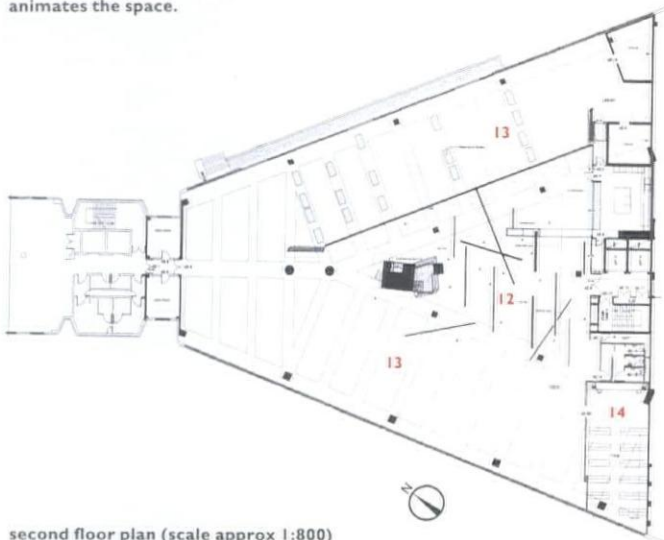
2 Open plan offices are arranged around the central courtyard.

3 The formerly open courtyard is the building's luminous heart.

4 Staff canteen at lower level animates the space.

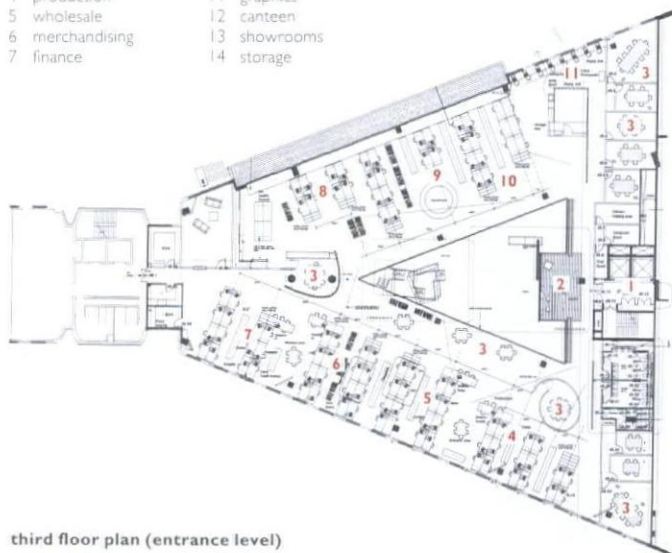


longitudinal section



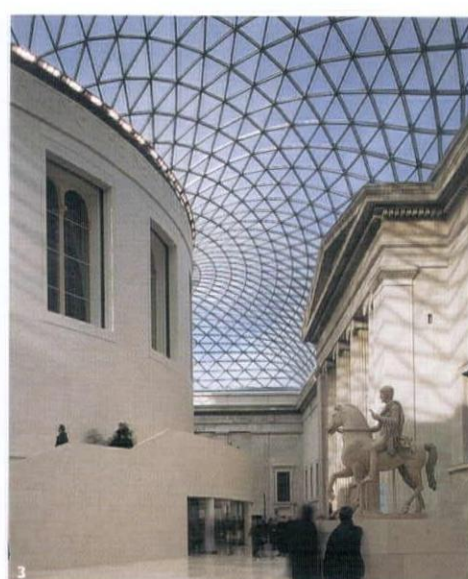
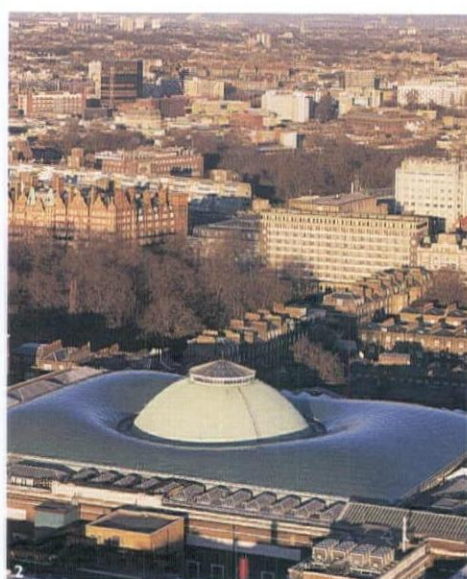
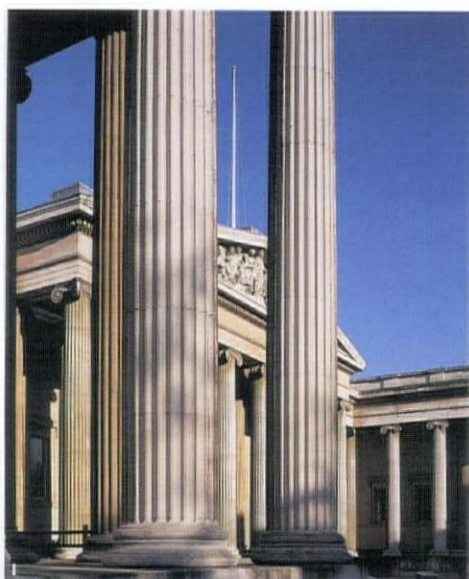
second floor plan (scale approx 1:800)

- |                 |                     |
|-----------------|---------------------|
| 1 lift lobby    | 8 product design    |
| 2 reception     | 9 marketing         |
| 3 meeting rooms | 10 special projects |
| 4 production    | 11 graphics         |
| 5 wholesale     | 12 canteen          |
| 6 merchandising | 13 showrooms        |
| 7 finance       | 14 storage          |



third floor plan (entrance level)





## MUSEUM REMODELLING, BLOOMSBURY, LONDON

ARCHITECT

FOSTER AND PARTNERS

If for nothing else, the millennial year in Britain was remarkable for an extraordinary expansion in museum construction. The year culminated with the opening of the Great Court at the British Museum – Foster and Partners' glamorous restoration to glory of Robert Smirke's Greek Revivalist courtyard and of his brother Sydney's famous round reading room, and the practice's addition to the courtyard of a billowing glass roof.

The last is an ambitious intervention, because of the scale and nature of the work to one of the country's most august institutions, and because it represents for the museum a wholesale change in emphasis, away from the scholarly to the popular (though the museum is keen to point out the academic will by no means be neglected). Its new image is due to a desire to attract more people and to this end, make the place more accessible, comprehensible and comfortable. In this the Museum is no exception, for all such recipients of lottery and private sources of monies must strive to be successful commercial concerns.

The history of change, past and present, to the British Museum is indissolubly linked with shortage of space. It was established in

1753 when Montagu House, a large mansion in Bloomsbury, was bought with lottery money to house the Sloane collection. Consisting of some 80 000 objects (natural history, antiquities and artificial curiosities, coins, prints, books, manuscripts) and a large herbarium, it had been bequeathed to the nation by collector and physician, Hans Sloane, and was one of the wonders of London.<sup>1</sup> Thereafter the collection grew apace with the nineteenth-century passion for exploration, discovery, and accumulation.

In 1816 (when Lord Elgin brought the Parthenon sculptures to London), Robert Smirke was brought in to alleviate the problem of space; and his scheme for a quadrangle, enclosing a two-acre courtyard, was begun in 1823 and finished about 25 years later. Designed in the then-fashionable Greek Revival style, the buildings at first incorporated Montagu House on the south. This was eventually demolished and by 1848 replaced by the present majestic south front.

By this time, lack of space was again a problem, in spite of the departure of the painting collection to the National Gallery. Developing the courtyard appeared an obvious solution and rough sketches for a

reading room in the centre, by the principal librarian, Antonio Panizzi, were worked into a formal scheme by Sydney Smirke, who had taken over as the museum's principal architect. Opened in 1857, this was as innovative a piece of engineering as Foster's new glass roof. In form a cylindrical drum surmounted by a hemispherical dome (a little smaller than that of the Pantheon in Rome), it had a cast-iron frame and cylindrical brick skin pierced by large arched windows. Its richly decorated interior is based on papier mâché panels fixed to a wooden underframe in turn attached to the cast-iron skeleton. In time, the rest of the quadrangle filled up with bookstacks.

According to deputy director, Suzanne Taverne, Foster's scheme has interpreted the museum's vision perfectly. Arising from the 'marriage of function and form'<sup>2</sup> it proposed a glorious new fulcrum. To achieve this, Smirke's courtyard would be cleared of bookstacks, and the facades restored. The round reading room, once closed to everyone without a reader's ticket, would also be restored and opened to the general public. It was to be surrounded by an elliptical structure providing two lecture

- 1 Robert Smirke's south (entrance) front of museum.
- 2 New glass roof and dome.
- 3 East side of reading room and shop to left.
- 4 Entrance to reading room, east staircase and portico.

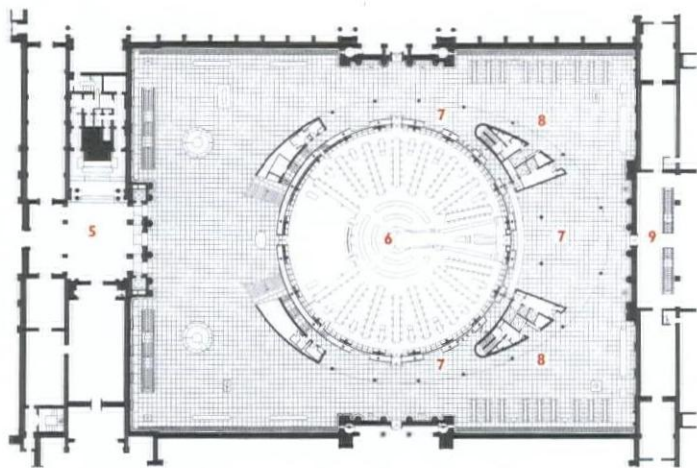
# THE GREAT COURT



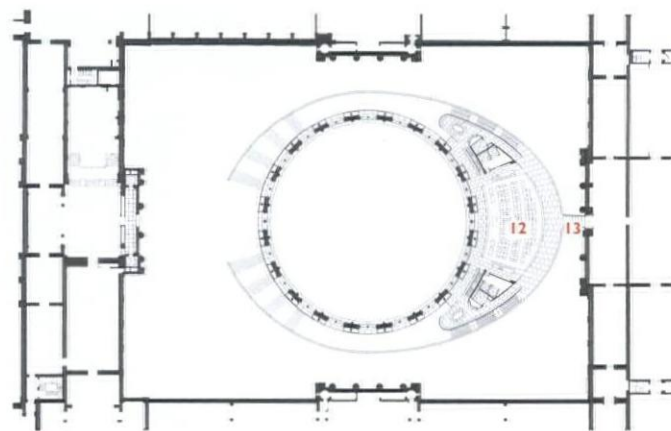
interior design



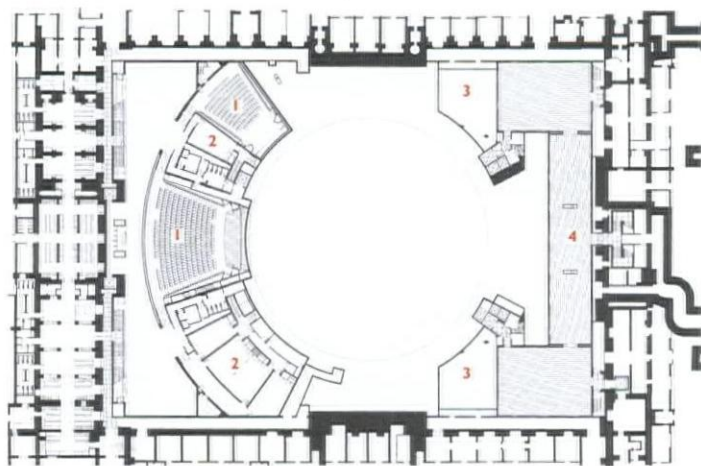




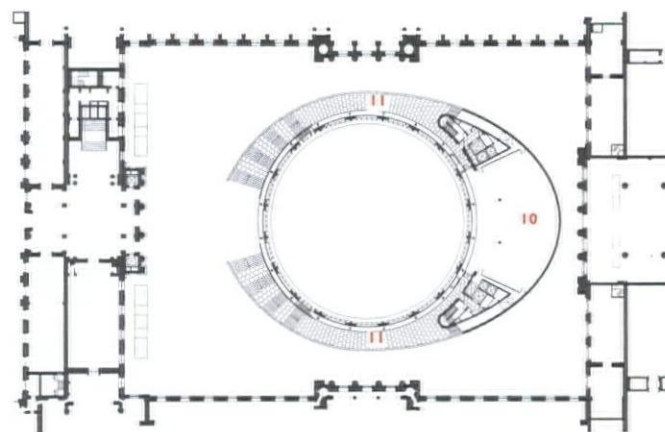
ground floor (scale approx 1:1650)



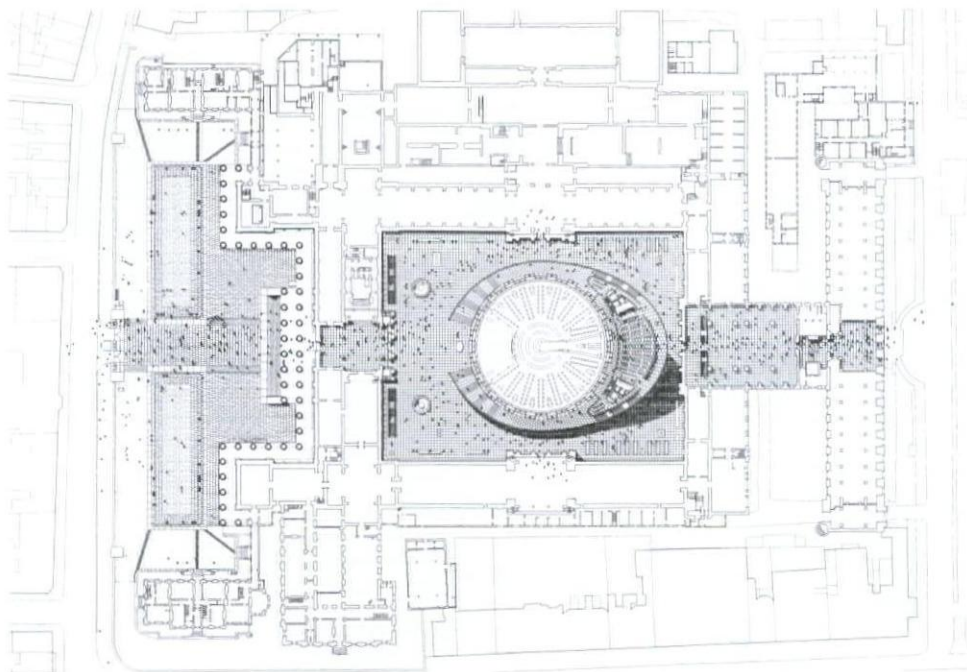
restaurant and upper floor



upper basement



Joseph Hortung gallery, middle floor



## MUSEUM REMODELLING, BLOOMSBURY, LONDON

ARCHITECT

FOSTER AND PARTNERS

5

Reading room from the south with glass roof springing from crown of drum above garland of lights.

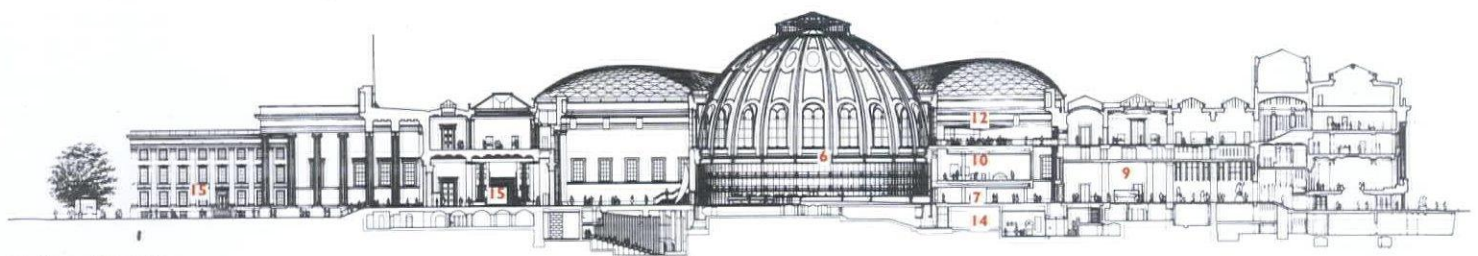
- 1 lecture theatre
- 2 seminar room
- 3 plant
- 4 Sainsbury African galleries
- 5 entrance (Weston) hall
- 6 reading room
- 7 shop
- 8 café
- 9 (new) Wellcome gallery
- 10 Joseph Hortung gallery
- 11 terrace
- 12 restaurant
- 13 bridge
- 14 kitchen
- 15 forecourt
- 16 King's Library



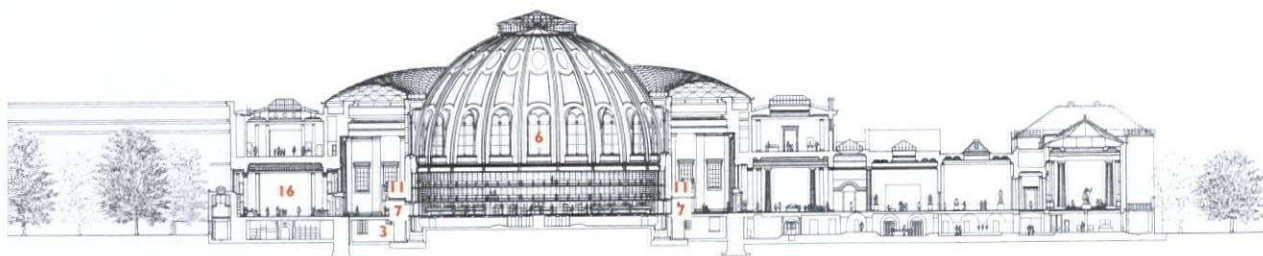




5

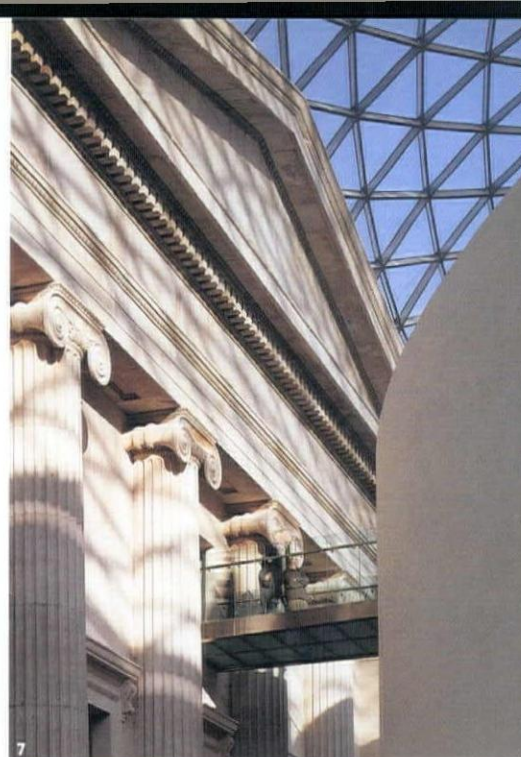


south-north section



east-west section





theatres and seminar rooms for a new education centre, a shop on the ground floor and restaurant on the top. Three bridges would lead to upper galleries on the west, north and east. And overall, would be a transparent roof so that the courtyard could be used like a winter garden in all seasons.<sup>3</sup>

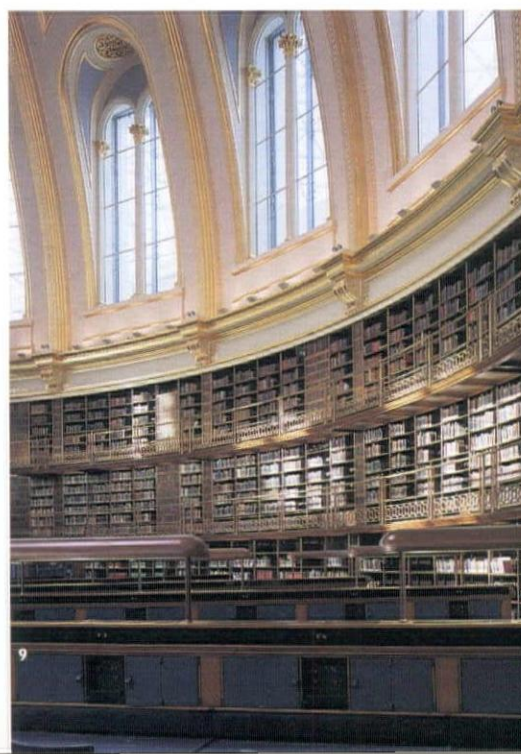
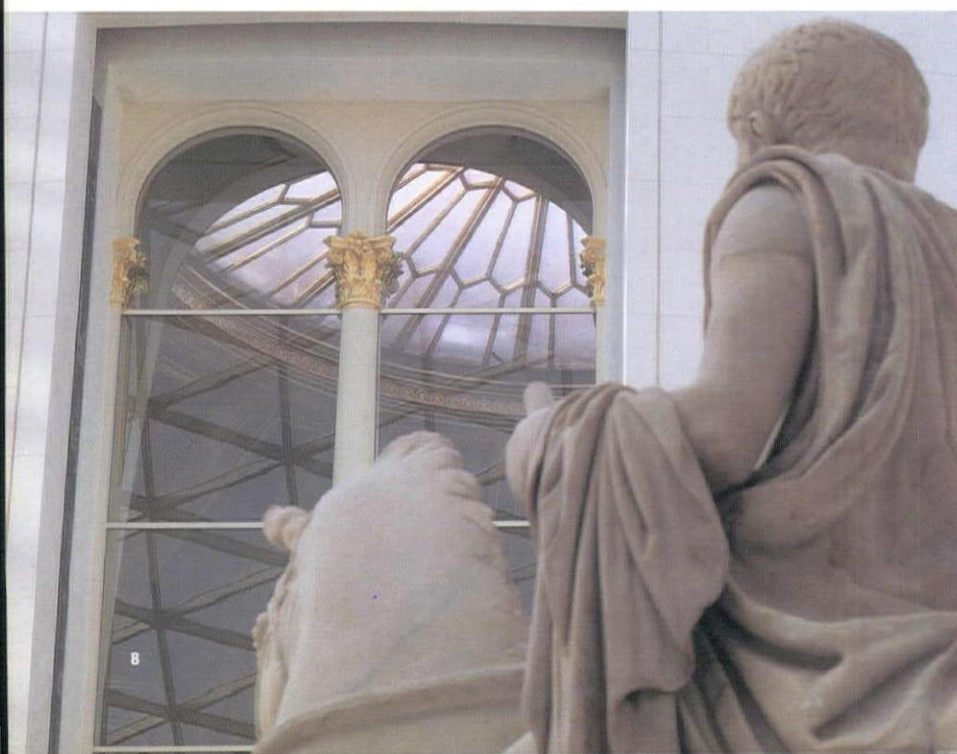
By 1998, when work began on the Great Court,<sup>4</sup> Foster's original plans had been changed somewhat. A glass roof was felt more desirable than plastic – more durable and presumably suited to the nineteenth-century traditions of the institution. An objection concerned the size of the ellipse which was felt to be too big for the square and too close to the south portico. So it was reduced to a half-ellipse on the north side, served by two monumental staircases leading

up to a crescent-shaped gallery. The restaurant above was made to look directly into the dome. It is linked to the Smirke building by the one remaining bridge (those on west and east were felt to obstruct views). Diminishing the ellipse meant finding another home for the education centre, which was moved to the upper basement.

Foster's scheme is an extraordinarily seamless affair with roof, reading room and floor a unified composition held within the Smirke's classical embrace. The restored and lusciously redecorated reading room is one of London's new treasures; and the steel and glass roof, designed with Buro Happold, a marvel of technology. It is a toroidal construction – a square doughnut with a hole in the middle – that recalls Foster's early

work with Buckminster Fuller. Arched for strength, it is a fine latticed shell floating without visible support and imposing as small a load as possible onto surrounding structures. Its complexity derives from the fact that the reading room is not exactly in the centre of the Great Court. The roof spans from the four sides of the quadrangle onto a new ring of 20 columns that surround the reading room's drum and are concealed by its new smooth stone skin. Triangular panels of fritted and tinted glass, each unique, are attached directly to the steel structure so that, springing from the crown of the drum above a garland of lights, it appears to be barely tethered.

Stonework is immaculately executed. The reading room and its semi-elliptical extension





## MUSEUM REMODELLING, BLOOMSBURY, LONDON

ARCHITECT

FOSTER AND PARTNERS

6 Around the facades, movement of toroidal glass roof is permitted by sliding bearings on a structure supported by steel columns.

7 North bridge to Robert Smirke's building from top of ellipse.

8 Externally, new arched windows to reading room replace modern insertions.

9 Papier mâché interior of reading room, restored and redecorated in blue, cream and gold. It houses Paul Hamlyn reference library and Walter and Leonore Annenberg Centre for information retrieval.

10 Exterior of new lecture theatre in upper basement, which houses Clore education centre and Ford centre for young visitors.

11 Elegantly disposed lecture theatre in upper basement for academic and corporate conferences, study days and cultural events.

are clad in monochromely pale Spanish stone counterpoised to the Portland stone of the Classical facades, in which patching is deliberately clearly visible.

On the south, the new enlarged portico was designed to improve access from the front hall and house liftshafts – which it does in reticent manner. But as part of the variegated composition, the white French stone of which it is constructed (to an outcry from conservationists) does have a lifeless quality. And in spite of, or perhaps because of, the Great Court's splendour, there are qualms. The very seamlessness of the composition, with its glossy floor, lends a sleekness that, for some, will accord ill with the rest of the museum. As a shining beacon in the museum's centre, it seems to suck

light from adjoining galleries. Then, the elliptical extension, up against the best of the porticos on the north, is simply too big. This is most evident on the west where the staircase swinging around dwarfs the portico. The roof is a marvel, but the swimming pool acoustics are oppressive and lighting on a dull day was gloomy.

Yet circulation has been improved immeasurably and no longer do you have to negotiate a labyrinth when traversing the museum. The Great Court is part of a larger scheme by the practice – the establishment of a clear route from south to north, from Great Russell Street and forecourt on the south, through the Great Court to the North Library and Montague Place.<sup>5</sup> Such a proposal clearly involves work on each side

of the quadrangle. On the south, Fosters' have redesigned the forecourt, setting off the majestic front of the museum and creating a new public square. A second phase will turn the North Library into new Ethnology Galleries. Completion is due in 2003. P.M.

1 *Building the British Museum*, by Marjorie Caygill & Christopher Date: published by the British Museum Press, p12.

2 *The Great Court and The British Museum*, by Robert Anderson, The British Museum Press: p41.

3 Smirke's proposals of 1821 envisaged a central garden for the public. In 1852, Charles Barry, architect of the Houses of Parliament, proposed a glass canopy supported by 50 pillars.

4 It was completed in two and a half years, a remarkable feat made possible by sophisticated engineering and building techniques. In particular, the exterior and interior were in a fragile state and ground movement had to be strictly monitored.

5 Part of a larger route from the British Library in the north, to Trafalgar Square and the Thames to the south, presaged by 1960s plans by Leslie Martin and Colin St John Wilson.

### Architect

Foster and Partners, London

### Project architects

Norman Foster, Spencer de Grey, Giles Robinson, Michael Jones, Julia Abell, William Castagna, Mark Costello, Daniel Goldberg, Nesa Marojevic, Peter Matcham, Filo Russo, Paul Simms,

Peter Vandendries, Oliver Wong, Diane Ziegler

### Structural/mechanical & electrical engineer

Buro Happold

### Acoustic engineering

Sandy Brown Associates

### Lighting design

Claude Engle

### Historic building advisor

Giles Quarme Associates, Caroe and Partners,

Ian Bristow

### Photographs

Richard Bryant, Arcaid 1,2,3,4,5,7

Dennis Gilbert/VIEW 6,8,9,10,11



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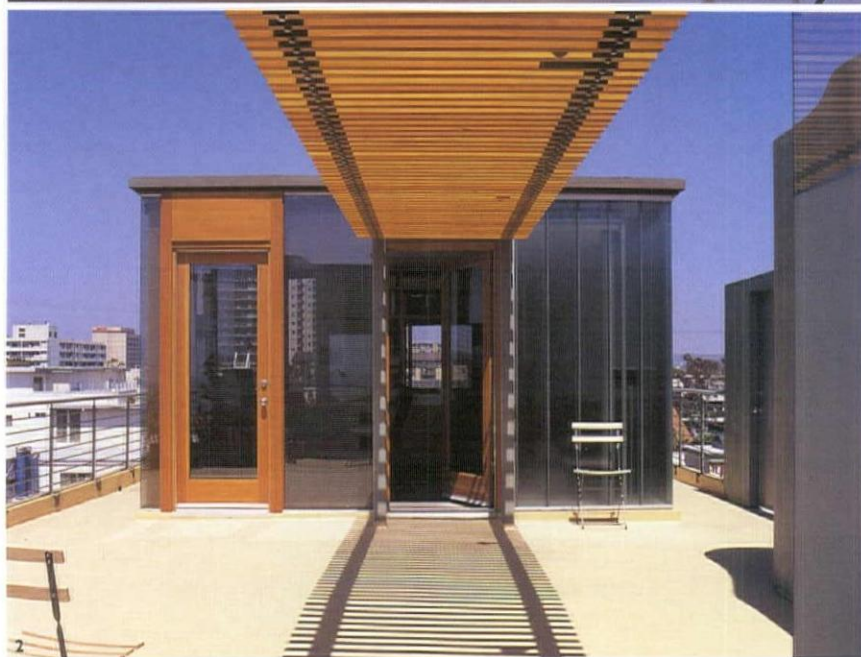


HOUSE, MARINA DEL REY,  
CALIFORNIA, USA  
ARCHITECT  
LORCAN O'HERLIHY

- 1  
Kitchen/dining area towards living  
room and sea. Floor of polished  
concrete.
- 2  
New library pavilion at end of roof  
terrace and trellised pathway.
- 3  
Living room with sliding doors to  
terrace. To left above, catwalk  
from bedroom to exterior perch.
- 4  
Stairs against translucent  
polycarbonate wall to upper floor.

## BAY WATCH

The spare design of a two-storey penthouse apartment takes advantage of the elevated site above a Californian beach at Marina del Rey and opens it up to the sky and sweeping views of the Pacific Ocean.



The apartment overlooks the beach at Marina del Rey, west of Los Angeles and beyond Santa Monica and Venice. Design began with stripping out 2400 sq ft, back to the essential structure and adapting the space to the flexible requirements of a young couple. The shell encompassed two levels including a roof terrace, and since the clients required a library, one was added to the terrace.

In contriving this airy light-filled dwelling, Lorcan O'Herlihy's starting points were the wide views and the nature of the long thin box with only one external wall. For the most part, division is informal with spaces flowing one into the other vertically and horizontally





towards the light. Living quarters were installed downstairs with a generous open kitchen/dining area occupying the main central section raised to conceal ducting to services concentrated along the south wall. To the west you step down into the double-height living room where a glass curtain wall gives onto a terrace from which you can survey the beach. At the private east end is a spare room and elegantly detailed bathroom.

A flight of stairs, with slender balustrading, floats in front of a translucent glass wall, and takes you up to the galleried bedroom. One of the many nice details in this scheme is the catwalk which runs from it along the south wall, over the living room and through the glass wall to a perch – a kind

of crow's nest – from which to watch the sun set over the Pacific. Such subtle reinforcement of the long axis is continued in the other direction in the form of a narrow wooden trellis tracing a path across the terrace from bedroom to library.

Light has been made an architectural element by means of skylights at intersections of wall and ceiling, and a light well over the stairs. In the shower room, a glass corner onto the terrace – clear at the top, sandblasted and opaque at the bottom – allows you the luxury of showering (in private) in sunshine.

Materials and finishes are few. In general, walls are white and reflective; warm maple floors in living room and bedroom are







# **HOUSE, MARINA DEL REY, CALIFORNIA, USA**

ARCHITECT

**LORCAN O'HERLIHY**

**5**  
Main bathroom and shower with glass corner and small window onto terrace. Concrete bench and floor, and bluestone washstand.

**6**  
Terrace and trellis from bedroom to library. Glass corner of bathroom to left.

counterpoised to polished concrete ones used in the rest of the apartment; a bluestone washstand stands opposite a concrete bench in the main bathroom.

Such surfaces, austere treated, emphasize volumetric simplicity; and, permeated by the diaphanous light characteristic of this part of the world, the sequence of flowing spaces becomes opulent. P.M.

## **Architect**

Lorcan O'Herlihy, Culver City, California

## **Project architects**

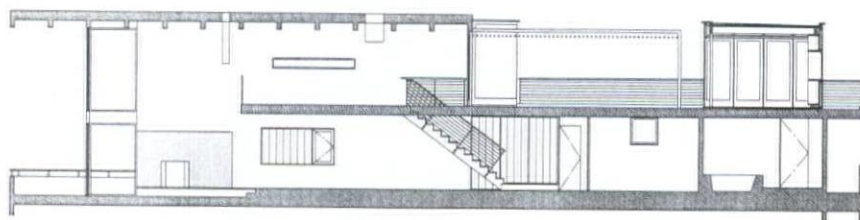
Lorcan O'Herlihy, Vincent Lee,  
David Thompson, Janice Shimizu,  
William Duncanson, Michael Poirier

## **General contractor**

Michael MacDowell

## **Photographs**

Tom Bonner, Dominique Vorillon

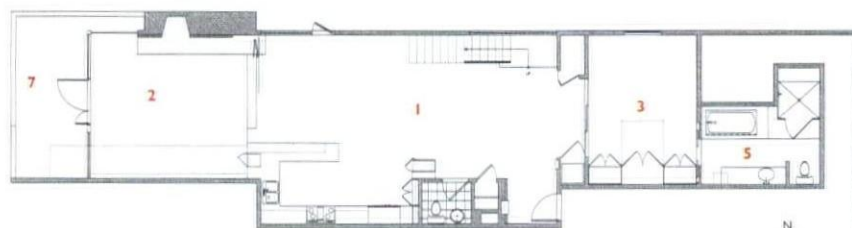


west-east long section

- 1 kitchen/dining room
- 2 sitting room
- 3 study
- 4 bedroom
- 5 bathroom
- 6 void
- 7 terrace
- 8 library



upper floor plan



lower floor plan (scale approx 1:200)







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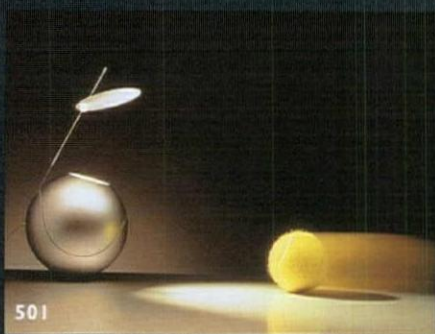
  
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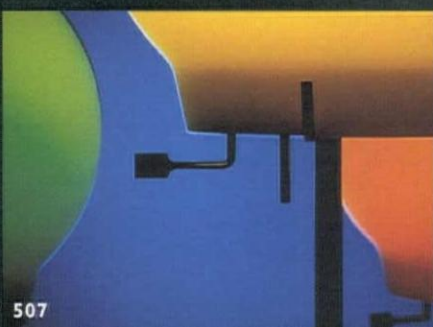
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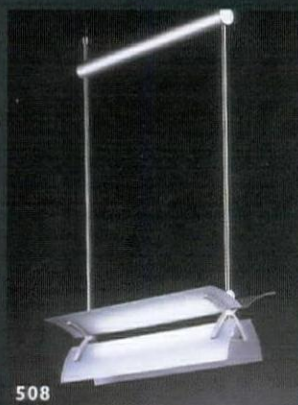


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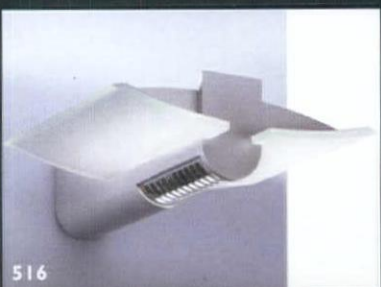
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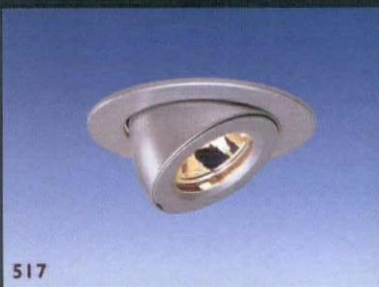
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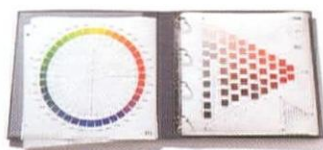




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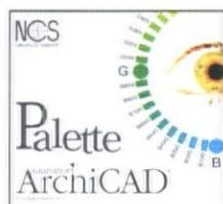


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### CITY TRANSFORMED: URBAN ARCHITECTURE AT THE BEGINNING OF THE 21ST CENTURY

By Kenneth Powell. London: Laurence King, 2000. £45

Commentators as different as Peter Hall in his encyclopaedic and scholarly *Cities in Civilisation*, and Rem Koolhaas in the polemic of *S,M,L,XL*, agree that the contemporary city defies simple description. The European city is different from the American city and both are different again from the city of south-east Asia. But, even within broadly similar geographical regions, one city may be as different from another as it is from one on the other side of the globe. On the other hand it may be possible to identify striking similarities in the issues which confront cities which are geographically remote from each other.

It is this complexity which provides the context for Kenneth Powell's book. In it he gathers together over twenty projects, proposed or realized in the last ten years or so, to construct a review of the current state of the relationship between architecture and the city. In a brief introductory essay he paraphrases the history of the city itself and of urban theory, from which he derives four ad hoc categories under which he discusses the individual projects.

In the first section, Healing the City, projects as different as Koetter Kim's masterplan for the Victory District of Dallas, Piano's Potsdamer Platz in Berlin, Group 91's Temple Bar in Dublin and Siza's reconstruction of the Chiado district of Lisbon allude to the widely differing pathology of the contemporary city and to the varied nature of diagnosis and treatment. The computer-generated images and real estate terminology of Dallas are literally and

metaphorically a world away from the delicate specificity of Temple Bar and the Chiado.

In Extending the City the discussion moves from the centre to the periphery and, in Ho Chi Minh City, Canary Wharf, the Almere masterplan, Kop van Zuid at Rotterdam, the Inner Harbour at Duisburg and the redevelopment at and around Kuala Lumpur airport we suddenly recognize more similarities than differences. It is, on this evidence, on the city fringe where the models of globalism are most able to assert themselves. In this company Herzog & de Meuron's elegant project for Link Quay at Santa Cruz, Tenerife is inevitably the odd-one-out.

The third category, Cities in Motion, brings together projects which focus on the redevelopment of major railway stations. These are the Metro and Abando transport interchange at Bilbao, by Foster and Wilford respectively, von Gerkan Marg's station quarter at Stuttgart, and their project at Frankfurt am Main, and the collaboration of UN Studio/van Berkel & Bos in the scheme for Arnhem Central. The section also includes a description of Foster's Chek Lap Kok airport at Hong Kong and Farrell's Kowloon Station at the city end of the rail link.

The book ends with a representation of Culture and the City through five European projects. Dixon and Jones' Royal Opera House at Covent Garden, is followed by the Seine River-Gauche masterplan for Paris, at the heart of which is Perrault's Bibliothèque Nationale. Atelier Mendini's Groningen Museum – in collaboration with Coop Himmelblau and Philippe Starck – precedes Lluís Clotet's strategy for the revival of the Laval district in Barcelona within which is located Meier's Museum of Contemporary Art. The book ends with an account of the redevelopment of the Schouwburgplein in Rotterdam by West 8.

The inevitable problem with a book of this

kind is that the projects might overwhelm the development of the argument. This is not entirely avoided here and the emphasis is tilted towards description at the expense of critical analysis, but the selection of projects, and the careful discussion of each in turn, serves to demonstrate the complexity of the city at the millennium. It also shows how, within the dominance of globalism, it is possible for architecture to identify and represent the other agendas which bring specificity and value to urban life.

DEAN HAWKES

### DIVERSIFYING LANDSCAPE

### RECOVERING LANDSCAPE: ESSAYS IN CONTEMPORARY LANDSCAPE ARCHITECTURE

Edited by James Corner. New York: Princeton Architectural Press, 2000. £18.95

The aim of *Recovering Landscape* is 'to make provocative contributions to how our contemporary landscapes are designed, made, and culturally valued', and thus stimulate innovative new practice. This significant collection of essays makes an important contribution to a rapidly developing and highly relevant body of landscape theory.

Moving on from mired twentieth-century attitudes of landscape as 'scenic object, subjugated resource or scientific ecosystem', the many essayists (who include Alan Balfour, Denis Cosgrove, Christophe Girot, Marc Treib) use recent examples of landscape design from the US, Denmark, Holland, France, Germany, India and China to illustrate their culturally diverse insights.

Part I, Reclaiming Place and Time, represents ideas and methodologies on incorporating cultural and historical context in contemporary design. Part II, Constructing and Representing Landscape, addresses the influence of aerial surveillance, imaging and new methods of representation which underlie innovative constructs, and introduces ideas of cultural exchange. Part III, Urbanising Landscape, discusses programmatic and other new approaches to significant public open space. It traces developments (by Koolhaas, Geuze and others, influenced in part by Holland's engineered landscapes) of provocative networks and typologies for regional planning and new urbanism.

Recurring themes include visual, perceptual and ecological issues; global and local surveillance, new technologies, networks and philosophies; and the 'commodification of landscape'. I recommend *Recovering Landscape* to all landscape, architecture and urban design practitioners and students interested in understanding, internalizing and/or realizing exciting issues of contemporary landscape practice. The illustrations enhance the text. There is no index.

ELSA LEVISEUR



*Theseus's Voyage to Crete by the Master of Campa Casone, an early sixteenth-century depiction of the world's most famous maze from Through the Labyrinth: Designs and Meanings over 5000 Years by Herman Kern (Prestel, London, £50, 2000). Kern (who died in 1985) looks at mazes from their earliest known times. All cultures seem to have had a deep fear and lust for the mysteries of the labyrinth. Kern shows hundreds of examples, and a text that has been translated from German with enthusiasm and added to by two American editors, Robert Ferré and Jeff Saward. No maze enthusiast can do without the book.*



## DULL GREED

### INTRODUCING PLANNING

By Clara Greed. London: The Athlone Press. 2000. £16.99

Clara Greed provides a broad introduction to the world of urban planning for students and lay people alike. Ranging from the organization of the planning system, the history of planning practices from ancient times to the present to social and planning theory, Greed presents a conventional left-of-centre argument for the present and future role of planning. Particular attention is paid to environmental, gender and minority issues. While there is some discussion of planning under the EU and mention of a few models from the US, the emphasis is primarily on Britain. Those who are seeking a more comparative discussion of urban planning need look elsewhere.

*Introducing Planning* is a useful if at times superficial discussion of British planning and its many approaches and controversies. Overall the book is informative and provides guidelines and bibliography for further study. Urban designers and architects, however, might find Greed's unimaginative discussion of spatial design something of a straitjacket, limited as it is to the more technical aspects of design.

The book, for all its shortcomings, might be a serviceable introduction but for one significant flaw: Greed's writing is in need of a great deal of editing. Awkward, ungrammatical even nonsensical sentences, as well as confusing and overly long paragraphs fill the text. As a result, the book reads like the first draft of what could have been a useful addition to the discussion of British town planning. EDWARD ROBBINS

## LIVING AT HOME

### SINGLE FAMILY HOUSES: CONCEPTS, PLANNING, CONSTRUCTION

Edited by Christian Schittich. Basel: Birkhäuser Edition Detail. 2000. SFr 88

'Yet another anthology of houses' one groans. But don't groan. There are some really good houses here that are as yet unknown to you.

The suburban house is often vilified, but it retains its fascination. This book recognizes the criticism, and the introduction acknowledges that it leads to sprawl while accepting that it is most people's ideal. The book starts with three introductions, looking at the house as image, as function and as myth. I found it interesting that the authors regard the centre of interest as having moved from tackling issues of style to issues of lifestyle. That's encouraging.

These introductions are followed by case studies of 16 houses from around the world. All

the houses are worth study. All were unknown to me, as were all but three of the architects. It says much for the creativity of our profession that there are so many fine houses built that do not make our magazines. As one might expect of a German book, there is a great concern with ecological issues, and some of the houses are really marvellous – I wanted to get on the next plane to Portugal to see the house in Moledo by Eduardo Souto de Moura.

This book is published by *DETAIL* – the excellent German architectural magazine which emphasizes detail and construction. As might be expected from this parentage the houses are grouped according to means of construction: timber, steel, concrete and masonry. Each house is beautifully illustrated with plans, sections and relevant construction drawings all to scale. Architects will enjoy some of the details, often showing a precision that we find difficult to achieve in Britain. JOHN WINTER

## ENTREPRENEURIAL ENTHUSIASM

### CITIES FOR A SMALL COUNTRY

By Richard Rogers and Anne Power. London: Faber & Faber. 2000. £14.99

Richard Rogers has become one of the more astute and most successful political campaigners of recent times. Now in the House of Lords, an adviser to both Tony Blair and Ken Livingstone, guiding light behind the Urban White Paper, his transformation from High-Tech architect to benign urban masterplanner has been rapid and seamless. He will have deserved his peerage if only for re-routing the flight plans of UK politicians and urban regeneration professionals away from Baltimore to Barcelona. In this crisp, well-illustrated and highly readable book he is joined by his fellow Task Force member Anne Power, to reprise and expand upon the themes of their Urban Renaissance report.

Every current demographic trend, attitudinal survey, housing, employment and transport statistic is contained here. The now well-known examples of pedestrianization in Copenhagen, urban bus systems in Curitiba, high density housing schemes in the Netherlands, are described and praised, and the whole book is driven by a breathless enthusiasm for a new kind of urban entrepreneurialism that is almost convincing – but which lacks a killer blow. As Will Hutton points out in his rather sober introduction, the government remains defensive to the point of timidity about the need for radical measures to reverse the urban exodus. This is because every proposal flagged up by Rogers and Power goes against the grain of current market trends and choices – for green-field living, for gated and self-selecting lifestyle



Louis Hellman's brilliant *archi-têtes* (first drawn for the AR) amazingly sum up the character and approach of their subjects, by creating their faces out of bits of their architecture. There has been nothing like them since Giuseppe Arcimboldo depicted the Holy Roman Emperor Rudolf II in vegetables and fruit at the turn of the sixteenth century. They have been collected in Hellman's *Archi-têtes: the id in the grid*, Wiley-Academy, Chichester, England, 2000, £15.99. Here is Aldo Rossi, with all his quirky bravery, irony, brutality, humour and perverseness, wonderfully recomposed from Venice, Berlin and numerous places in between.

communities, for the personal autonomy provided by the car, for electronic self-sufficiency and insularity, and so on.

What eludes Rogers and Power is the ability to identify the crucial factor which might trigger a return to cities. Now that housing and work have been de-coupled by the rise of the daily commuter journey and electronic home-working, the only social institution which still shapes and in some cases determines housing mobility and choice is education. If city schools and colleges were to become the very best in all the league tables, they might act as magnets for urban renewal. The other factor looming on the horizon is environmental. A rising tide no longer lifts all boats but sweeps through all houses built on flood plains, and makes many roads and railways lines impassable. Climate change may force people back into the security and safety of city life. Pray for rain.

KEN WORPOLE

Book reviews from this and recent issues of *The Architectural Review* can now be seen on our website at [www.arplus.com](http://www.arplus.com) and the books can be ordered online, many at special discount.



# delight

**ON TEMPORARY DISPLAY IN LONDON, THESE VERY RARE ICONS FROM ST CATHERINE'S MONASTERY IN SINAI ARE AN ENDURING TESTAMENT TO THE GRACE, BEAUTY AND POWER OF THE NUMINOUS.**

The historic Greek Orthodox monastery of St Catherine on Mount Sinai in Egypt is the oldest monastery in the world. The sacred desert site is the object of pilgrimage for Christians, Muslims and Jews, who come to visit its holy places, notably the Burning Bush and the summit of Mount Sinai, where Moses received the tablets of the Law. The present buildings and church were constructed in the sixth century, at the instigation of the Byzantine emperor Justinian. Built as a martyrium around the site of the Burning Bush, the church has maintained a tradition of prayer, worship and contemplation since that time. During the tenth century, relics of the Alexandrian martyr St Catherine were brought to the monastery, attracting streams of pilgrims and travellers. During the eleventh century, a mosque was constructed inside the monastery walls, so it came to exert a profound influence over the entire region.

St Catherine's remains one of the most charismatic places in the religious world and its sacred character has been intensified by the presence of over 2000 icons, either produced on site by itinerant artists (some of whom stayed on to become monks), or sent as gifts from elsewhere. Dating from the sixth century, these treasures escaped destruction during the period of iconoclasm in the eighth and ninth centuries, because of the monastery's geographical isolation. Iconoclasm ended with the triumph of Orthodoxy, which established icons as a key element of the true Orthodox Church. As religious objects, icons became a particular focus of prayer, veneration and the symbolic expression of Christian belief. And as monks became increasingly important in Byzantine society, both in cities and in the wilderness, monasteries and their patrons played a pivotal role in the evolution of the painted panel. This led, eventually, to the development of the modern Orthodox iconostasis or screen of icons used to demarcate the altar from the nave.

This winter, 10 icons from St Catherine's were on display at London's Courtauld Institute in a small yet exquisite exhibition that originally formed part of a much larger survey of icon art staged at the Hermitage Museum in St Petersburg. Never before had the paintings left the confines of the monastery, so it was a chance to contemplate works of great rarity and beauty. Included were an elaborate rendition of the martyrdom, of St Catherine, which was placed over her relics at the monastery, and two icons that marked the special holy sites of Mount Sinai: Moses receiving the Law and the prophet Elijah being fed by a raven during his flight through the wilderness (both shown here, together with St Michael the Archangel). In the sepulchral light of the exhibition, the icons' gold backgrounds glowed with a stunning intensity, as if lit from within, a reminder of the enduring grace and power of the numinous.

CATHERINE SLESSOR

*The exhibition was made possible by the Saint Catherine Foundation, a charitable organization that supports the conservation of the monastery's icons, manuscripts and monastic traditions. Work is already under way on the major task of rehousing and conserving the library of 4000 manuscripts. For further information on the Foundation's activities: +44 (0)20 7396 5420.*

