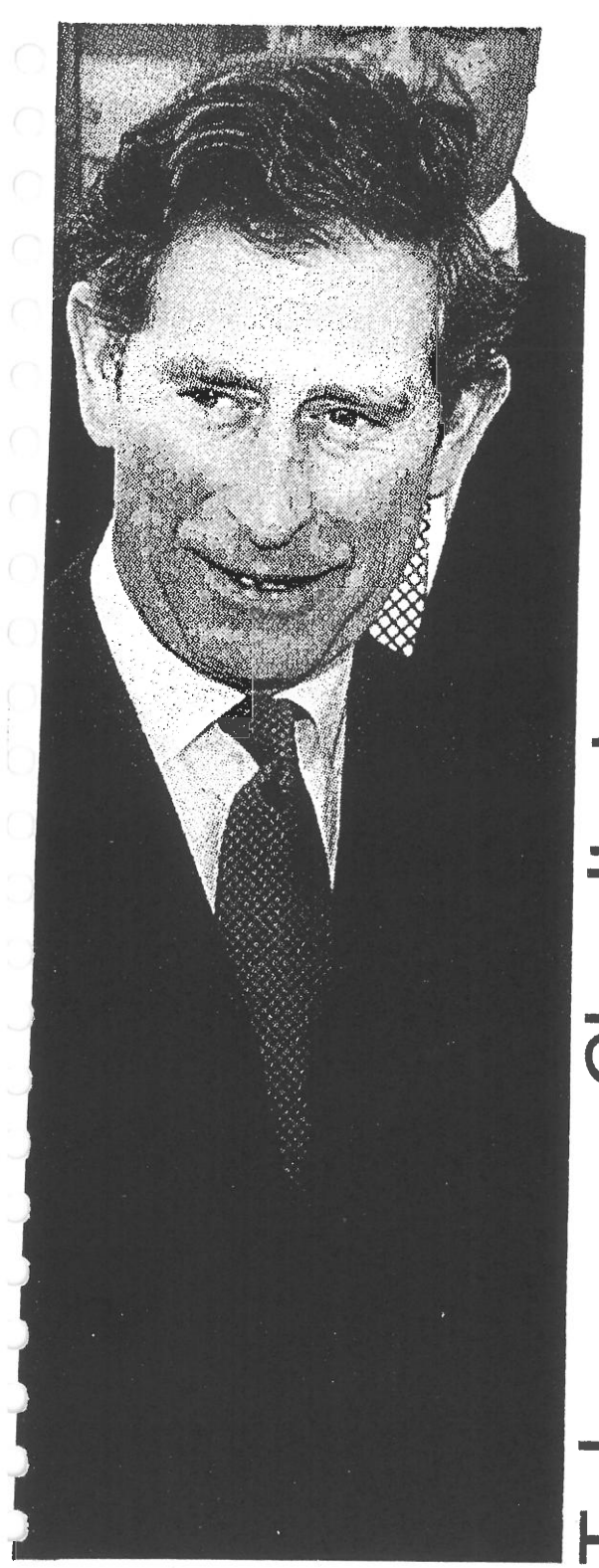


REISGIDS

London

excursie A et A

24 april - 27 april 1997

Take care, Charlie is near

Genootschap Architectura et Amicitia

LONDON EXCURSION : 24 - 27 april 1997

Participants

1. Mr. Peer Bedaux
2. Ms. Tonny Bedaux
3. Mr. Moshe Zwarts
4. Ms. Mineke Zwarts-Broekman
5. Mr. Fridjof van den Berg

6. Ms. Henny van den Berg
7. Mr. Roeland Dreissen
8. Mr. Peter Vermeulen
9. Mr. Gijs Tegelberg
10. Ms. Anèt Meyer

11. Mr. Tjakko Hazewinkel
12. Ms. Epke Beens
13. Mr. Hans Davidson
14. Ms. Bronia Davidson
15. Ms. Corien Sparnaay

16. Mr. Kees Volger
17. Mr. Ronald Wilken
18. Ms. Johanna van Amerongen
19. Mr. Hans de Moor
20. Mr. Gerard Comello

21. Mr. Menno Ongering
22. Mr. Jan Verster
23. Mr. Pieter Berger
24. Ms. Hanny de Jong-Siebeler
25. Ms. Trude Hooykaas-Dieckman

26. Mr. Rein Jansma
27. Mr. Chris Vegter
28. Mr. Bob Geerling
29. Mr. Jos Speller
30. Mr. Ton van Namen

31. Mr. Hans van Heeswijk
32. Ms. Madeleine Steigenga
33. Mr. Wessel Reinink
34. Ms. Els Proost-Teders

Overnachtingen

2-persoonskamers in: London Lodge Hotel
134/136 Lexham Gardens
W8 6JE LONDON
tel.: (00.44) 171.244.84.44
fax.: (00.44) 171.373.66.61

1-persoonskamers in: Amber Hotel
101 Lexham Gardens
W8 6JN LONDON
tel.: (00.44) 171.~~835.11.94~~ 373.8666
fax.: (00.44) 171.835.11.94

THURSDAY 24 APRIL

D 09.15 - A 09.15	**Flight UK 763: Schiphol - Stansted**	
D 09.45 - A 11.00	**By coach from Stansted to the London Docklands.**	
A 11.00 - D 13.15	Introduction and tour by Derek Hemingway, starting at the London Docklands Visitor Centre, 3 Limeharbour, Isle of Dogs, London E14.	
	. Thames Flood Barrier (1984)	GLC Department of Architecture
	. Pump House, Tidal Basin (1988)	Richard Rogers and Partners
	. Reuters Building (1989)	Richard Rogers and Partners
	. Financial Times Print Works (1988)	Nicholas Grimshaw
	. Control Centre and Lifting Bridges (1990)	Allsop, Lyall and Störmer
	. Pumping Station (1988)	John Outram Associates
	. Compass Point (1987)	Jeremy Dixon
	. North Entrance to Greenwich Foot Tunnel	
	. Canary Wharf Office Development (1988-1991)	Pelli and Associates / Pei, Cobb, Freed & Partners / SOM / KPF / Troughton McAslan
	. Footbridge (1996)	Future Systems
	. Cascades (1988)	CZWG Architects
A 13.15 - D 14.15	**Lunch at Canary Wharf.**	
A 14.30 - D 16.00	Presentation on the Jubilee Line Extension by Roland Paoletti, architect 30 Marsh Wall, Isle of Dogs, London E14.	
A 16.30 - D 18.00	Butlers Wharf:	
	. Design Museum (1989)	Conran Roche
	. London School of Economic Studies Residence (1989)	Conran Roche
	. David Mellor Building (1990)	Michael Hopkins & Partners
	. Horselydown Square (1989)	Wickham & Associates
	. The Circle (1989)	CZWG Architects
	. China Wharf (1988)	CZWG Architects
D 18.00	**Coach leaves for hotel:** **London Lodge / Amber Lexham Gardens, London W8.**	

FRIDAY 25 APRIL

D 08.45	**Coach leaves from hotel.**	
A 09.30 - D 10.00	. OXO: Mixed use development (1996)	Lifschutz Davidson
A 10.15 - D 12.00	The City:	
	. Broadgate (1984 -1991)	Arup Associates / SOM
	. Ludgate (1992)	SOM
	. Bracken House (1991)	Michael Hopkins & Partners
D 12.00	**Coach leaves for Slough. Lunch on the way.**	
	If time permits: a detour to Stockley Park, Uxbridge.	
A 14.00 - D 15.00	. Thames Valley University, Library (1996), Slough	Richard Rogers Partnership
D 15.00	**Coach returns to London.**	
A 16.00 - D 17.00	. Thames Wharf Housing and Studios (1984 /1987)	Richard Rogers Partnership
	. The Deckhouse (1991)	John Young
	Introduction by John Young.	
A 17.30 - D 18.00	**Grab a pint at the River Café or a pub around the corner.**	
A 18.30 - D 19.30	. Riverside Offices and Apartments (1990)	Sir Norman Foster and Partners
	Introduction and tour by Paul Kalkhoven, partner at Foster and Partners	
D 19.30	**Coach leaves for hotel.**	

SATURDAY 26 APRIL

D 09.00	**Coach leaves from hotel.**	
A 09.30 - D 10.30	. Waterloo Station International Terminal (1993)	Nicholas Grimshaw and Partners
	. Charing Cross Station (1990)	Terry Farrell & Company
A 11.00 - D 11.30	. Channel 4 Headquarters (1994)	Richard Rogers Partnership
A 11.45 - D 12.30	. Natural History Museum	
	Ecology Gallery (1991)	Ian Ritchie Architects
	Dinosaur Gallery (1992)	Ron Herron @ Imagination
	Wonders (1993)	David Chipperfield Architects
A 12.30	**Individual programme for the afternoon.**	

Museums and galleries

. Clore Gallery, The Tate Gallery Millbank SW1	Stirling & Wilford
. The Sainsbury Wing, National Gallery, Trafalgar Square WC2	Venturi, Scott Brown
. Sackler Galleries, Royal Academy Piccadilly W1	Foster Associates
. Osho Gallery, The Economist Building, St James's Street SW1	Stanton Wiliams
. The Lisson Gallery, 52 Bell Street NW1	Tony Fretton

Bookshops for architectural/art books

. Triangle Bookshop at the Architectural Association
36 Bedford Square WC1

. RIBA Bookshop at the RIBA building
Portland Place W1

. Waterstones
Kensington High Street W8
Charing Cross Road WC2

. Foyles
Charing Cross Road WC2

Shops and restaurants (see enclosed lists)

SUNDAY 27 APRIL

	Early morning jog in Hyde Park or just a stroll around Kensington and Holland Park.	
D 10.30	**Coach leaves from hotel. (Don't forget to take your luggage!)**	
A 11.15 - D 11.30	. Tottenham Hale Station (1991)	Allsop, Lyall & Störmer
A 13.00 - D 13.15	. Schlumberger Research Ltd (1985 / 1992)	Michael Hopkins and Partners
A 13.30 - D 14.30	**Pub lunch in Cambridge.**	
A 14.00 - D 18.00	Guided tour around Cambridge with Mr. Viren Sahai, Chairman of Society of Architects in Cambridge, to:	
	. Fitzwilliam College Chapel (1991)	MacCormac Jamieson Prichard
	. St. Johns College Library (1993)	Edward Cullinan Architects
	. Rare Books Repository, Newham College (1982)	Van Heyningen Haward Architects
	. Post-graduate Study Centre, Darwin College (1994)	Jeremy Dixon/Edward Jones
A 16.15- D 16.45	**Time for a cup of tea**	
	. Faculty of History Library (1968)	James Stirling and Partner
	. Harvey Court Residential Building (1961)	Sir Leslie Martin and Colin St. John Wilson
	. Law Faculty, Cambridge University (1995)	Sir Norman Foster and Partners
	. Lecture Hall, Emmanuel College (1996)	Michael Hopkins and Partners
	. The Judge Institute, Cambridge University (1996)	John Outram Associates
D 18.00 - A 19.00	**By coach from Cambridge to Stansted.**	
A 19.15	**Check in.**	
A 19.30 - D 20.15	. Stansted Airport (1991)	Sir Norman Foster and Partners
D 20.45 - A 22.45	**Flight UK 774: Stansted - Schiphol.**	

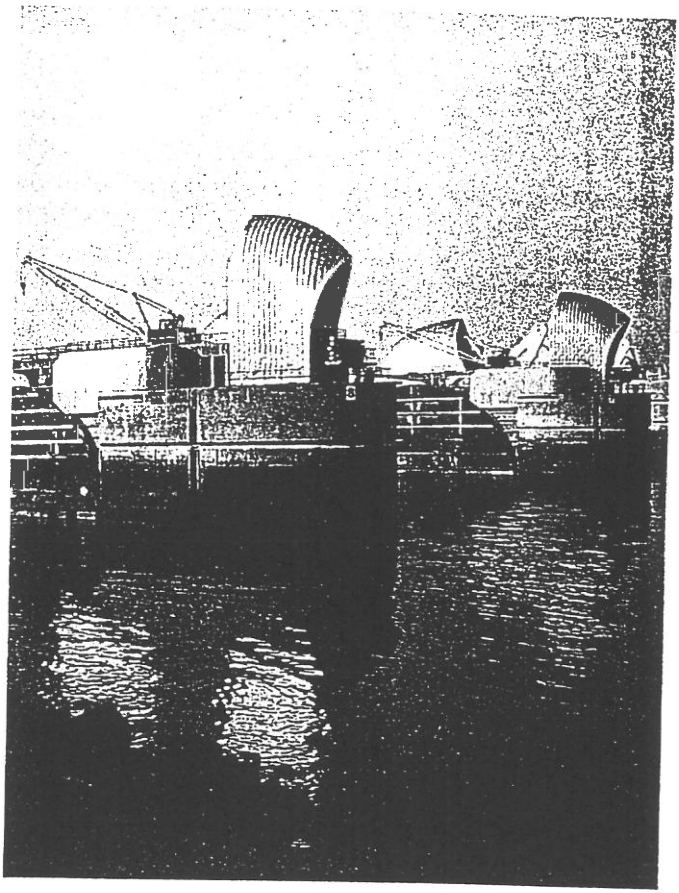
Winkels	adres	architect	branche
Omgeving Knightsbridge			
Equipment	21 Sloane Street	David Chipperfield	mode
Esprit	6 Sloane Street	Foster Associates	mode
Joseph Pour la Maison	16 Sloane Street	E Jiricna	mode
Kenzo	19 Sloane Street	E Jiricna	mode
Joseph Tricot	26 Sloane Street	E Jiricna	mode
Katherine Hamnett	20 Sloane Street	Nigel Coates	mode
Omgeving Brompton Road / Fulham Road			
Michelin Building	Brompton Road	Conran Roche	design
Jigsaw	31 Brompton Road	Nigel Coates	mode
Issey Miyake	270 Brompton Road	Stanton Williams	mode
Joseph pour la Ville	268 Brompton Road	E Jiricna	mode
Joseph	77 Fulham Road	E Jiricna	mode
Ook in deze omgeving:			
Jean Paul Gaultier	171Draycott Avenue		
Vivienne Westwood	World's End, 430 King's Road		
Omgeving Bondstreet			
Joan & David	Bond Street	Eva Jiricna	schoenen
Jigsaw	Bond Street	John Pawson	mode
Equipment Shop	26 Brook Street	David Chipperfield	mode
Ook omgeving Bondstreet:			
Vivienne Westwood	6 Davies Street		mode
	44 Conduit Street		mode

Restaurants	adres	architect
designrestaurants		
St. James'		
Quaglino's	16 Bury Street SW1	Terence Conran
Covent garden		
Now and Zen	4a Upper St Martin's Lane	Rick Mather Architects
Marylebone		
Doyle's Restaurant	bij Clifton Ford Hotel	Brady + Mallalieu Architects
Finchley Road		
Wakaba Restaurant		John Pawson and Claudio Silvestrin
Oxford Street		
Zoe Restaurant	St. Christopher'sPlace	Whitmore-Thomas
Mezzo	100 Wardour Street W1	Conran
Soho		
The Avenue	St James Street, Piccadilly	Rick Mather
Wagamama (Japans)	Streatham Street W1	David Chipperfield
Knightsbridge		
Harvey Nichols fifth fl	Knightsbridge	Wickham & Associates
Bibendum	81 Fulham Road SW3 In Michelin gebouw	Conran
Notting Hill Gate		
City Rhodes	New Street Square	JSP Architects
Chalk Farm		
Belgo Restaurant		Anand Zenz
River Café	Thames Wharf Studios, Rainville Road W6	
Butler's Wharf		
Blue Print Café	Design Museum SE1	
Overige interessante café's:		
Sticky Fingers	1a Phillimore Gardens W8	restaurant van Rolling Stone Bill Wyman

THURSDAY 24 APRIL

D 09.15 - A 09.15	**Flight UK 763: Schiphol - Stansted**	
D 09.45 - A 11.00	**By coach from Stansted to the London Docklands.**	
A 11.00 - D 13.15	Introduction and tour by Derek Hemingway, starting at the London Docklands Visitor Centre, 3 Limeharbour, Isle of Dogs, London E14.	
	. Thames Flood Barrier (1984)	GLC Department of Architecture
	. Pump House, Tidal Basin (1988)	Richard Rogers and Partners
	. Reuters Building (1989)	Richard Rogers and Partners
	. Financial Times Print Works (1988)	Nicholas Grimshaw
	. Control Centre and Lifting Bridges (1990)	Allsop, Lyall and Störmer
	. Pumping Station (1988)	John Outram Associates
	. Compass Point (1987)	Jeremy Dixon
	. North Entrance to Greenwich Foot Tunnel	
	. Canary Wharf Office Development (1988-1991)	Pelli and Associates / Pei, Cobb, Freed & Partners / SOM / KPF / Troughton McAslan
	. Footbridge (1996)	Future Systems
	. Cascades (1988)	CZWG Architects
A 13.15 - D 14.15	**Lunch at Canary Wharf.**	
A 14.30 - D 16.00	Presentation on the Jubilee Line Extension by Roland Paoletti, architect 30 Marsh Wall, Isle of Dogs, London E14.	
A 16.30 - D 18.00	Butlers Wharf:	
	. Design Museum (1989)	Conran Roche
	. London School of Economic Studies Residence (1989)	Conran Roche
	. David Mellor Building (1990)	Michael Hopkins & Partners
	. Horselydown Square (1989)	Wickham & Associates
	. The Circle (1989)	CZWG Architects
	. China Wharf (1988)	CZWG Architects
D 18.00	**Coach leaves for hotel:** **London Lodge / Amber Lexham Gardens, London W8.**	

Thames Barrier



(Former) GLC Department of Architecture 1984

Thames Barrier

The Visitors' Centre (for a nominal charge of £2.25, and the handbook at £2.95) will provide you with detailed information about the construction and the workings of the Thames Barrier in a typically early 1980s multi-media way, set to an equally suspect rock-opera soundtrack to heighten your experience of this genuinely remarkable engineering feat. The best bit is a model of the Barrier which actually rotates to demonstrate its actions at an intelligible scale.

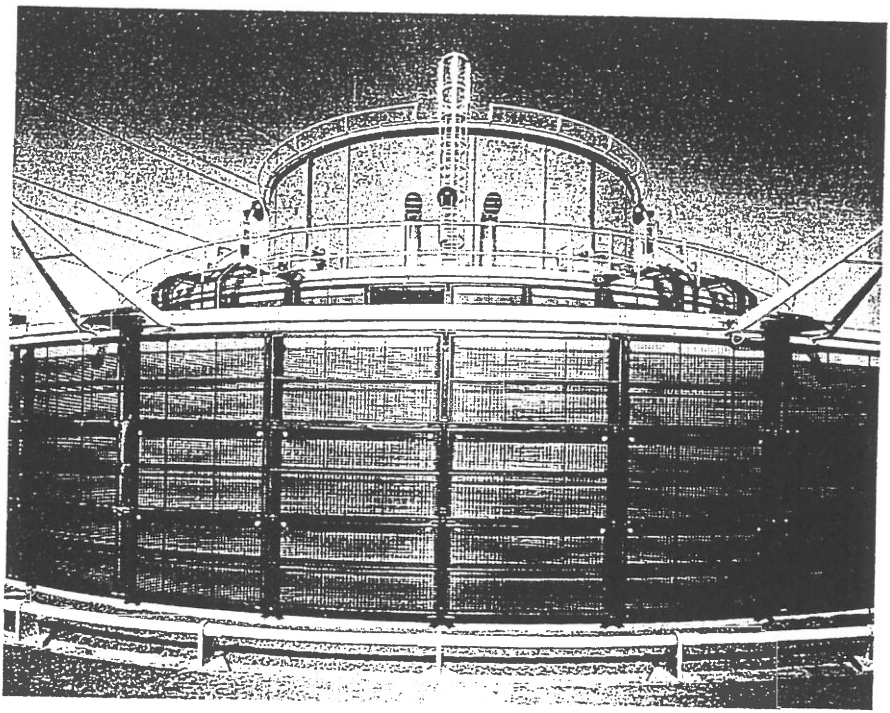
The need for such a barrier arose from two main factors: the high-water level at London Bridge is rising by about 750 mm a century due to the melting of the polar ice caps; and the action of surge tides which originate as zones of atmospheric pressure off the coast of Canada. Where the warm Gulf Stream meets the cold Labrador Current the sea is raised approximately 300 mm. This hump of water moves across the Atlantic and occasionally northerly winds force it down the North Sea, sending millions of tonnes of extra water up the Thames.

Between 1953 and 1970 many schemes were proposed for different types and locations of barrages, guillotine gates and retractable bridges. One and a quarter million people spread over 116 square kilometres were at risk, so in 1970 the Greater London Council was given responsibility for the whole flood-prevention scheme. The width of the river is divided by piers to form six openings for shipping and four subsidiary non-navigation openings. Reinforced-concrete piers founded on coffer dams (watertight boxes of interlocking steel plates) support a rotating circular arm to which is fixed the silver moon-shaped gate. The seating for the gates is provided by concrete sills, containing service ducts, which were cast, then sunk to the level of the chalk riverbed. The largest sill measures 60 x 27 x 8.5 metres and weighs 10,000 tonnes.

The gates themselves – four of 1500 tonnes and two of 750 tonnes –

(Former) GLC Department of Architecture 1984

Pump House



Richard Rogers Partnership 1987–1988

Pump House

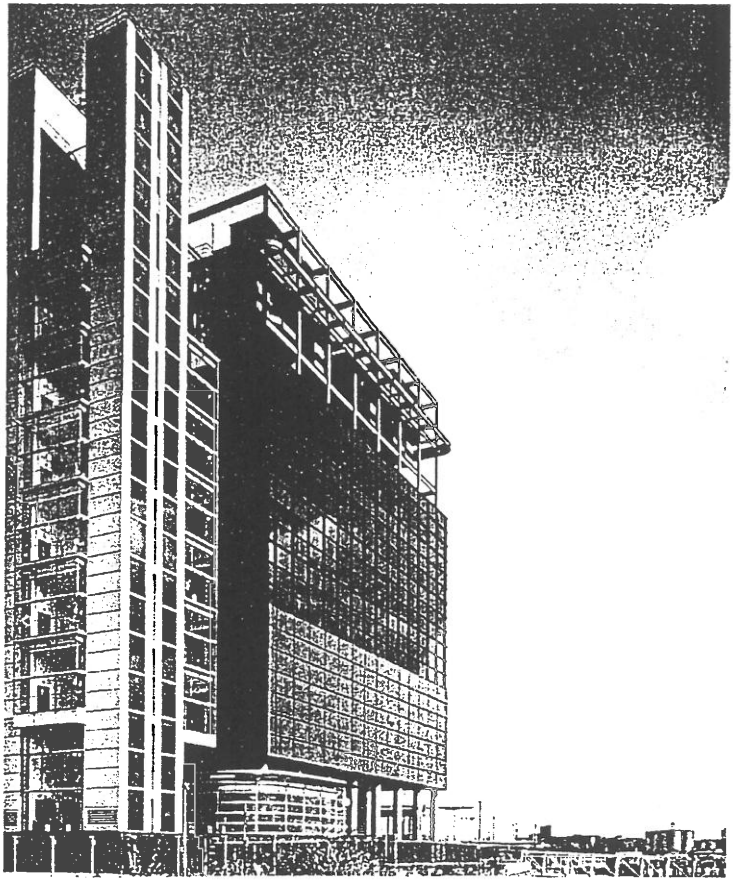
This water-pumping station is part of the new infrastructure of the Royal Docks. It not only performs the essential function of lifting waste water up from underground channels to discharge into the River Thames, but It has also become a prominent landmark in the Docks.The design of the building was informed by its specific function. It was necessary to organise the servicing and operational requirements above ground in a low-maintenance, hard-wearing structure. This has manifested itself as two 12-metre-high concentric drums containing the electrical support functions. But this is just the tip of the iceberg. Inside there are 25-metre-deep shafts containing pumps and pipes. The surfaces of the concrete drums are brightly coloured and all steelwork is boldly detailed to maximise the impact of a building that is generally uninhabited.

With their vents and funnels, the pump houses in London are rather like elaborate tube-station entrances. Although there is no public access to the buildings, they are interesting to see just because they house machmes not people.

ADDRESS Tidal Basin Road, Royal Victoria Docks, London E16 [7H 65]
CLIENT London Docklands Development Corporation/Sir William Halcrow & Partners
STRUCTURAL ENGINEER Sir William Halcrow & Partners
SIZE 850 square metres
DOCKLANDS LIGHT RAILWAY Custom House
ACCESS none

Richard Rogers Partnership 1987–1988

Reuters Building



Richard Rogers Partnership 1989

Reuters Building

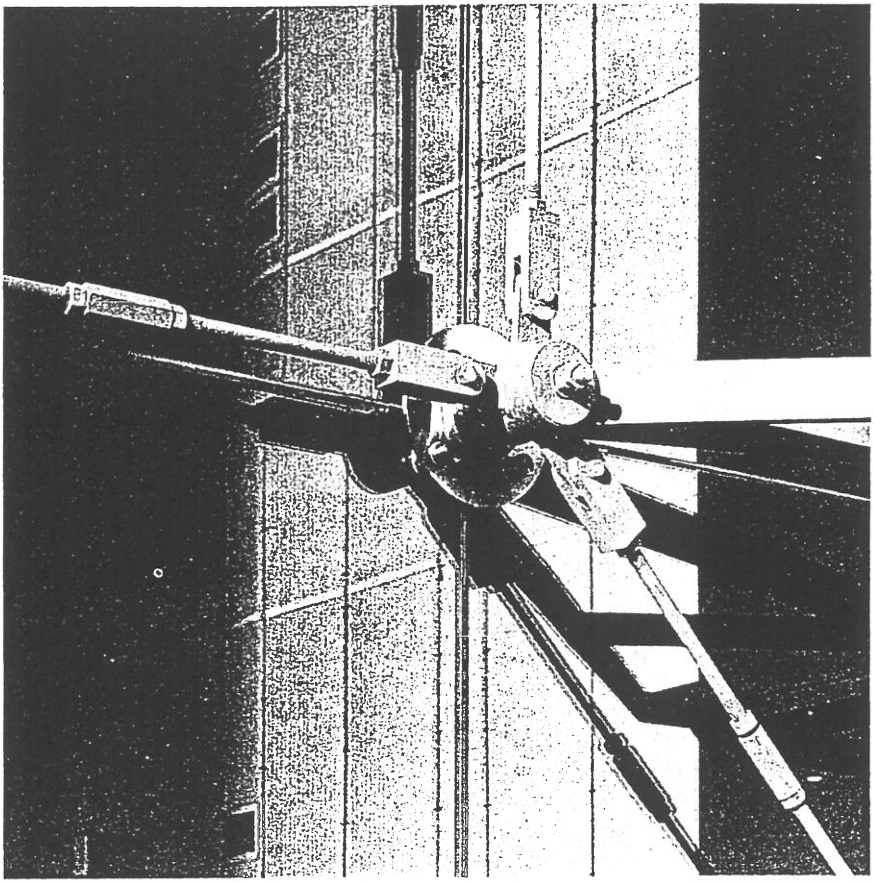
Another top-secret building in the Vauxhall Cross genre. This one houses the Reuters press agency. All of the information passing in and out of the building is electronic, invisible; hence the vast rooftop plant to control the internal environment which is primarily occupied by computers.

The black façade (like the tinted windows of a limousine) of the stumpy block is blind, allowing no visual access from the outside. Glazed stair towers are the only clue that humans inhabit the building. The small roof cranes and the partially unfinished quality of the roof plant (steel members are exposed where cladding has been left off) are undoubtedly the work of Rogers, emphasising, as much as possible, the operational aspect of the building rather than presenting an anonymous container.

ADDRESS Commodity Quay, East Smithfield, London E1 [7F 63]
CLIENT Rosehaugh Stanhope Development plc
CONTRACT VALUE £85 million
SIZE 27,900 square metres
DOCKLANDS LIGHT RAILWAY All Saints
BUS 5, 15, 40, 86, 106, 277, 278 to East India Dock Road
ACCESS none

Richard Rogers Partnership 1989

Financial Times Print Works



Nicholas Grimshaw and Partners Limited 1988

Financial Times Print Works

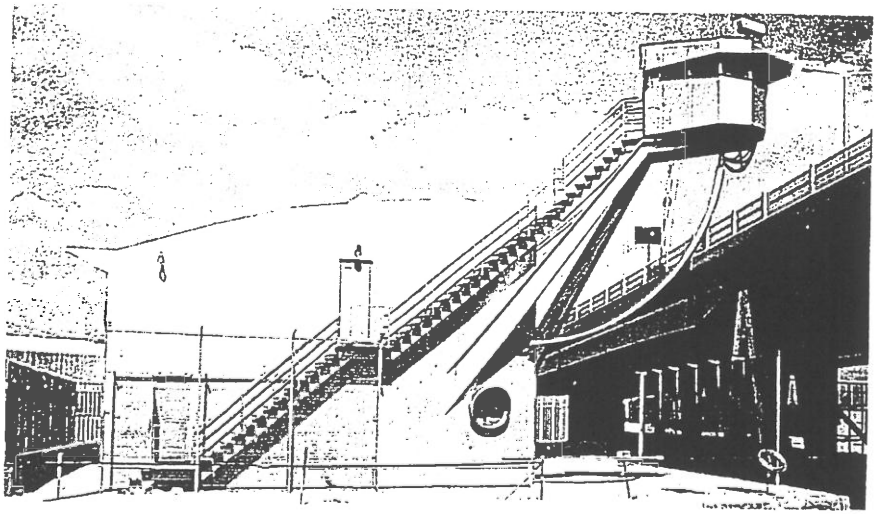
From the 1920s until the 1980s, most of the UK's national newspapers resided in and around Fleet Street in celebrated office buildings which sat above basement printing works. The *Financial Times* was no exception and lived in Bracken House (designed by Sir Albert Richardson *c* 1959). However, with new editorial and production technology, it is no longer necessary for journalists, typesetters and printers to be together in the centre of the city, so in a positive gesture towards the regeneration of Docklands the FT moved to its print works within a year of its new home being commissioned.

The design of the building was determined by two printing presses which were already on order. This called for two 18-metre single-span spaces, one on the south side to accommodate offices and platemaking rooms and one on the north side to house the massive printing machines. These hall spaces run each side of a 12-metre-wide plant room. The full printing operation is on display through one big window (96 x 16 metres), following the tradition of this type of celebration of the printing process. The Pilkington Planar glazing system is made up of 2-metre square panes of 12 mm toughened glass bolted at each corner and sealed with silicone. The exterior fin-like steel columns, positioned every 6 metres, form a support for the roof and help to keep the glass in place. Positioning them on the outside of the structure leaves an uninterrupted internal space.

The structure of the printing presses dictates the organisation of the interior space, with four long levels, feeding rolls of pink paper from the bottom and pouring the ink from the top. The materials are stored and the finished product despatched (300,000 copies each night) in the two solid ends of the glorified shed. The skin is made from vacuum-formed panels of superform aluminium slotted together and resting on horizontal rails which collect rainwater away from the wall surface. Staircase towers

Nicholas Grimshaw and Partners Limited 1988

Control Centre and Lifting Bridges



Alsop Lyall & Störmer 1990

Control Centre and Lifting Bridges

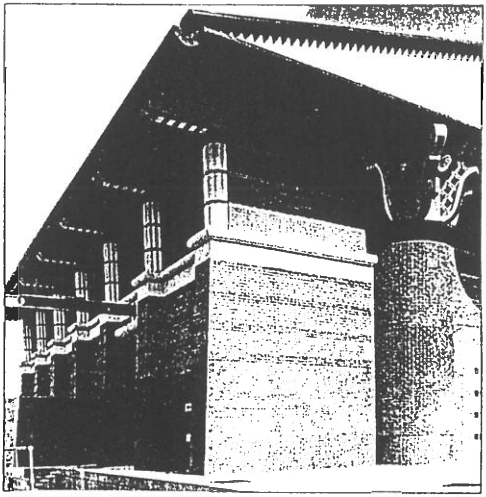
In the shadow of the monstrous Canary Wharf development, the gleaming Control Centre has invented an unselfconscious architecture all of its own. Deriving from the design intention to reveal all of the working parts of the bascule bridges, the architects have ingeniously created a separate building to house the hydraulic plant required to operate the counterweight system of the lifting bridges.

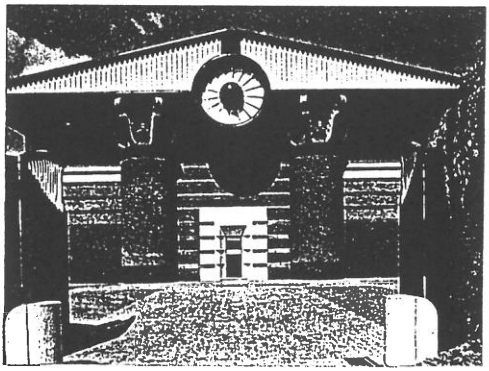
The simple steel-frame and steel-panel construction (welded on site) has been stretched and details exaggerated to create a bold, sculptural form. Each feature – gutter, air vents, staircase and control cabin – is an integral part of the structure, not a decorative afterthought. The great A-frames, pivots and hydraulic rams are now in full view, as are the mooring platform, fishing platform and public staircase – all dramatic silver elements set against the primary white structure of the bridges.

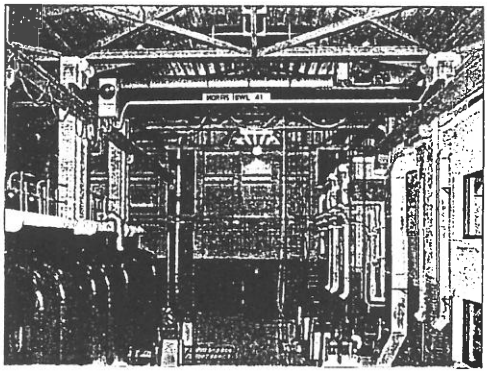
Many of these bascule bridges can be found in and around Chicago. This one, however, remains symbolic rather than practical as at present ocean liners do not navigate these docks.

ADDRESS Canary Wharf, Eastern Access, London E14 [80 E1]
CLIENT London Docklands Development Corporation
ENGINEER Mott MacDonald Civil Limited
COST £4 million
DOCKLANDS LIGHT RAILWAY Canary Wharf
ACCESS none

Alsop Lyall & Störmer 1990







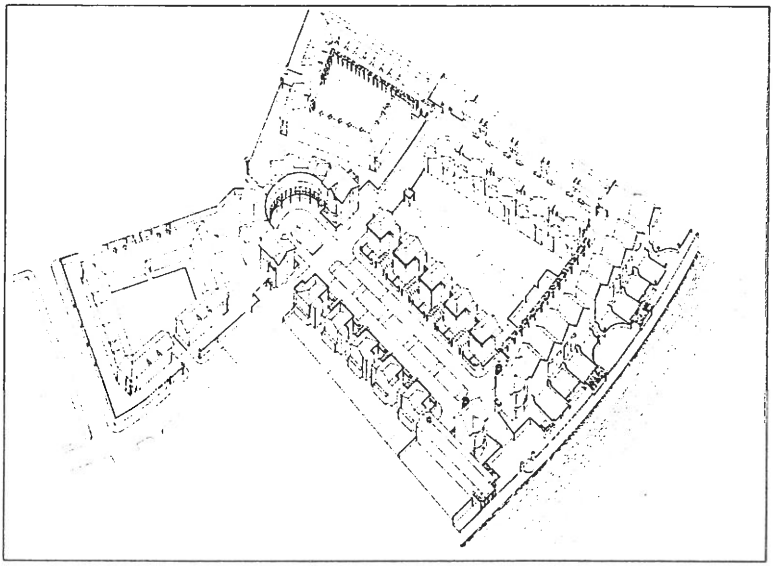
Storm-Water Pumping Station

The building houses a control and supply maintenance room for the electric pumps which are in chambers under the floor. When storm water flows from the Isle of Dogs into the underfloor chamber it is raised automatically into a concrete surge tank high above ground level and then forced by gravity into the Thames. The building is terrorist-proof and its concrete substructure is able to withstand an explosion. These factors explain why it is so massive in scale. Once you get over the sheer size of it and realise that the 3000-mm-diameter propeller does actually rotate at 16 rpm to evacuate gases that may build up inside, and appreciate the detailing that shows no signs of aging (after all it was built to last 100 years), you realise that you are looking at a windowless shed. It is also a monument, 'a temple for summer storms'.

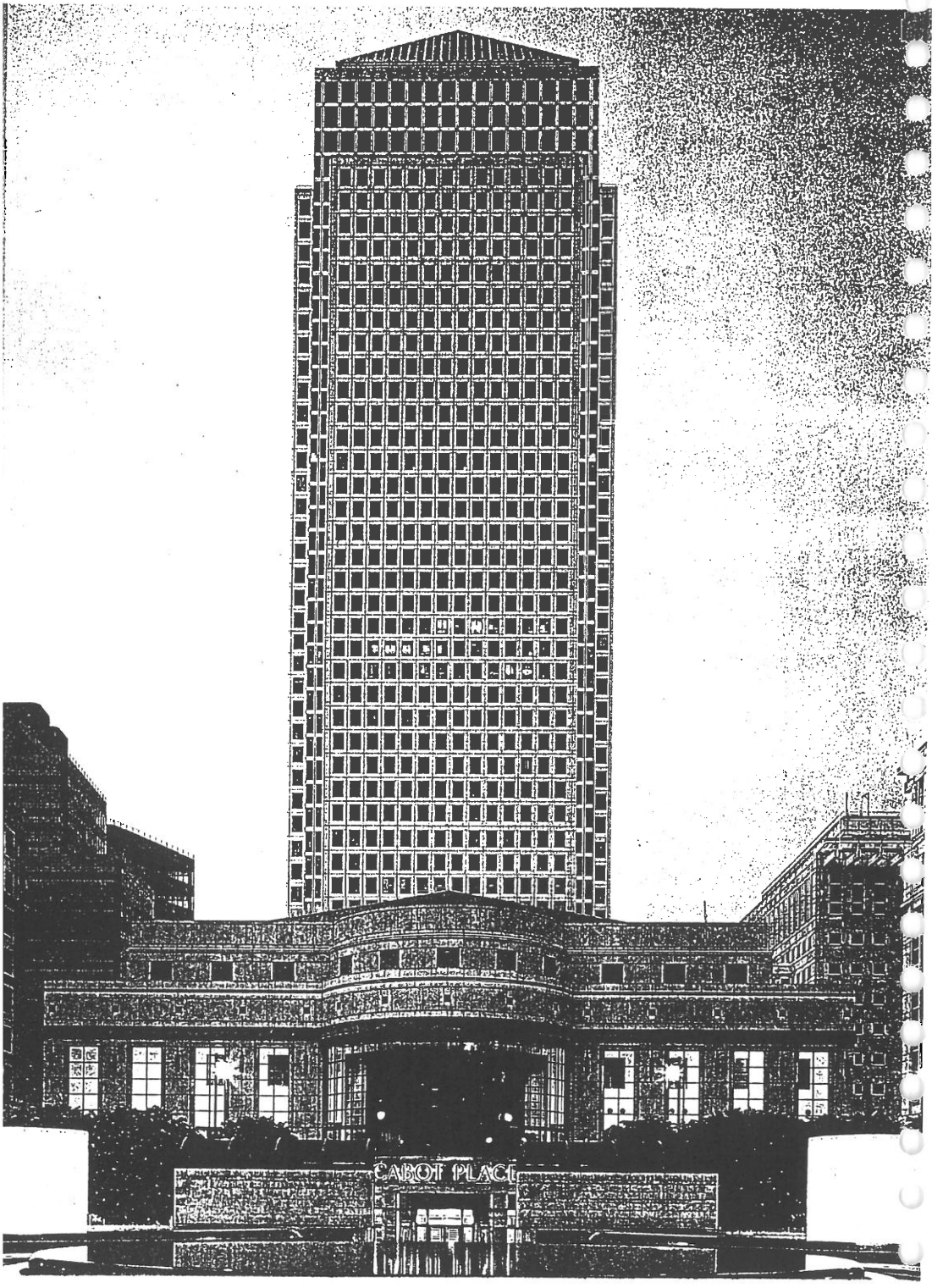
Colours and materials link directly with the iconography: slate-blue bricks signify the river which flows through the two vast trees (columns) on the front and back façades, and red and yellow stripes signify the mountainside from which the water flows. The columns are not supporting the lightweight pediment but are disguising steps and ducts. Each element of the building has been embellished in a manner which portrays Outram's own imagination and fascination for assemhling and exaggerating historical symbols.

ADDRESS Stewart Street, Isle of Dogs, London E1 [2E 80]
CLIENT London Docklands Development Corporation/Thames Water
STRUCTURAL ENGINEER Sir William Halcrow & Partners
CONTRACT VALUE £3.5 million
SIZE approximately 670 square metres
DOCKLANDS LIGHT RAILWAY South Quay
ACCESS none

John Outram 1988



Compass Point
Manchester Road, Isle of Dogs, London E14
Architect: Jeremy Dixon
Client: London Docklands Development Corporation
Completed: 1988
Size: 152 flats and houses
Access: Streets, open spaces and walkway along river
This scheme by Jeremy Dixon is a serious attempt to reinstate the traditional domestic street as a model for new housing. Notwithstanding the quirky Dutch gables and an unaccustomed lack of shelter on the Thames side of the waterfront houses, there is a comforting sense of having been here before. The combination of straight avenues and a crescent, of gardens backing on to one another, of dark brick and white render, and front doors set into the shelter of formal rendered porches and curved bay windows is quintessentially English. The challenges here were considerable: the price of the courtyard houses was set by the LDDC within a range of £30–40,000 to ensure availability to lower-income groups. Elsewhere they range up to £200,000. Dixon was not invited to supervise construction and the standard of attention to detail, the mean quality of materials, and thin finishes are disappointingly and shamefully poor.


CABOT PLACE

SKIDMORE OWINGS & MERRILL

CANARY WHARF
Docklands

Skidmore Owings & Merrill were responsible for both the master plan and infrastructure design of the Canary Wharf Development in London's Docklands. The master plan calls for the organisation of office buildings along either side of the existing quay with public amenities arranged in a linear sequence through the centre. These features include landscaped and hard-surfaced open spaces, a retail centre and a station for the Docklands Light Railway with waterside walks and plazas on the perimeter.

To control and coordinate the design of individual buildings design guidelines were prepared in conjunction with the master plan. These address basic design and development parameters such as permitted uses, plot ratio, bulk and massing, materials and pedestrian enhancements. Upon completion, the Canary Wharf development will house a working population of 50,000 people.

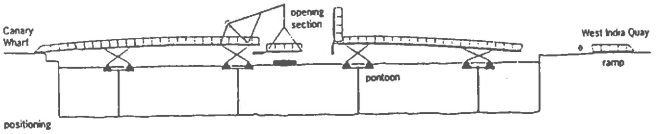
The Canary Wharf Development is intended to revitalise a vacated seventy-one acre site, once part of the Port of London and now under the control of the London Docklands Corporation. Two miles east of the City of London, on the northern part of the Isle of Dogs, the site extends over half a mile eastward from the Thames along Canary Wharf to Blackwall Basin and is made up of three elements: land between the wharf and the Thames, twenty-five acres; the wharf, twenty-one acres and building platforms above existing dock water twenty-five acres.

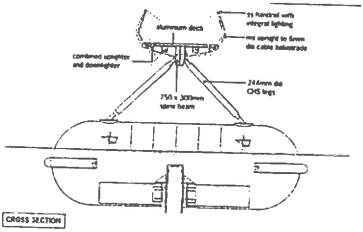
Canary Wharf is specifically designed to accommodate the expansion of London's financial services sector, providing 12.5 million square feet of office space and financial trading floors, as well as public recreational and retail facilities. It is currently the largest commercial development in the world. Other contributing architectural practices included Cesar Pelli & Associates, Pei Cobb Freed & Partners and Kohn Pederson Fox Associates/EPR Partnership.

Canary Wharf consists of up to twenty-six separate building sites including three carefully located office towers. These landmark buildings, visible from the City, will enrich the London skyline and identify the wharf from a distance. The remaining buildings are of limited height, designed to frame and animate the sequence of landscaped areas that constitute the public realm. The full development of the site and the provision of open space calls for buildings to be constructed over the water at points to the north and south of the wharf. Thus, the impounded water will not form a linear passage, but a series of water courts ringed by pedestrian areas.

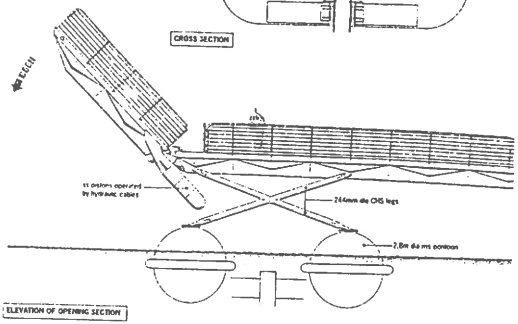
After a study of London squares, parks, streets and buildings, architectural guidelines were developed to ensure that each individual parcel would contribute to the image of the project as a whole. These guidelines include consistent use of cornice lines, stone bases, setbacks, street furniture and other site elements both within and without the individual parcels. These elements along with easements and riverside walkways are intended to provide a continuous and varied pedestrian network.

FROM ABOVE: Roof Plan of Canary Wharf; 25 Cabot Square, SOM; 1 Cabot Square, Pei Cobb Freed & Partners; 10 Cabot Square, SOM; OVERLEAF FROM L TO R: 25 Cabot Square, SOM; 20 Cabot Square, Kohn Pederson Fox Associates and EPR Partnership; 30 The South Colonnade, Kohn Pederson Fox Associates/ EPR Partnership; 1 Canada Square, Cesar Pelli & Associates

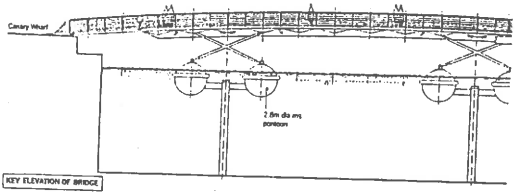




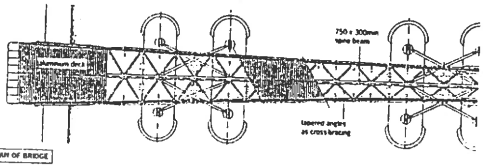
CROSS SECTION



ELEVATION OF OPENING SECTION



KEY ELEVATION OF BRIDGE



KEY PLAN OF BRIDGE

Footbridge

A new pedestrian bridge, as light and delicate as an insect water-skater, spans the water between Canary Wharf and West India Quay in London's Docklands. Designed by Future Systems, it is a floating structure, a gently curved, 94m arc of aluminium deck with four sets of splayed legs that rest on half-submerged pontoons.

'The idea of a floating bridge has been around since about 2000BC,' says Jan Kaplicky of Future Systems, which won the competition to design the bridge in 1994.

This is an elegant solution to site problems: a condition of the competition was that no loads be imposed on the waterfront at the two ends. Future Systems' use of pontoons avoids this, and requires only light-tension piles to be driven underwater to secure them.

The bridge is a minimal structure; it gives pedestrians who pass over it a feeling of freedom and space, and allows unobstructed views over the water and its environs.

It links two urban landscapes of contrasting height and scale; the vertical commercial towers of Canary Wharf and the smaller nineteenth-century warehouses of West India Quay. The bridge is modestly non-competitive with either; it lies low on the water, emphasising its horizontality.

The use of pontoons allowed the bridge to be fabricated off-site under controlled conditions and floated upstream into position. It was made in two main sections by Littlehampton Welding and transported by road to Royal Albert Dock. Here it was assembled and towed by tug up the Thames, through the Thames Barrier, and into West India Quay, where the pontoons were positioned and jacked down on to the piles.

The bridge structure comprises a 750mm-deep, 300mm-wide U-shaped spine beam that runs under the aluminium deck; tapered angles, set diagonally to the spine beam, help to cross-brace it. The deck tapers in plan towards the centre to lighten the structure and emphasise the perspective.

Tubular metal legs, 244mm in diameter, are bolted to the spine beam; they terminate in solid, cone-shaped connectors welded to circular plates which are bolted to the pontoons. The bulk of the foam-filled steel pontoons is below water-level – only 500mm of their 2.8m-diameter bulk is above the surface.

The deck is divided into three: two gently inclined sections on each side of a central section, 6.6m long, which can be lifted hydraulically to allow boats to pass through. The opening action is by a simple cantilever counterbalance; two stainless-steel pistons, operated by hydraulic cables set in the spine beam, are activated when needed by the harbour-master from a console on the dockside.

The deck is a 75mm-deep mill-finish aluminium box section, with a grooved pattern on the surface to give a non-slip surface. Its edges rest on perimeter supports – each a steel T-section welded to a half-round 219mm diameter CHS – which help to stiffen the deck structure.

Pedestrians are protected by a balustrade of 6mm-diameter stainless-steel cables. Uprights of 15mm-thick tapering steel flats on each side support a 60mm-diameter tubular stainless-steel handrail which curves round to become the end balusters; the cables are connected to these and tensioned with turnbuckles.

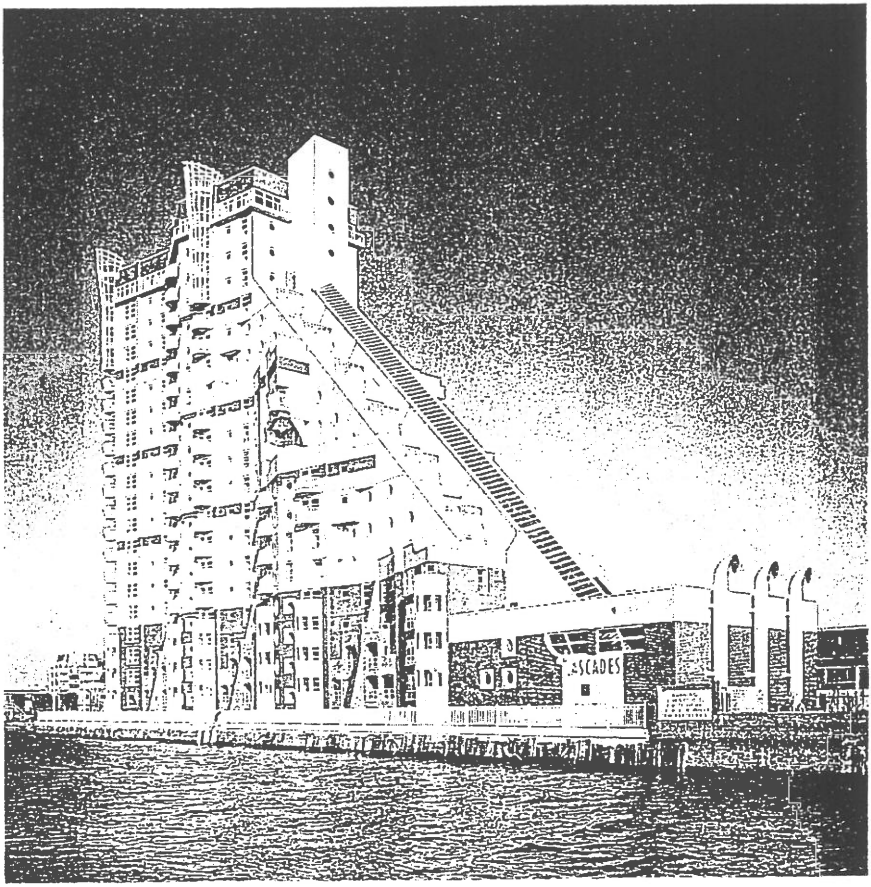
The bridge is lit at night by uplighters inset into the aluminium deck at its edges, which give the feeling of airport runway lights; they are fitted with dichroic filters of varying colour. Downlighters with translucent lenses are fixed underneath to shine on the water, supplemented by floodlights fixed to the bridge legs. Sealed polycarbonate units containing T2 miniature 9mm-diameter fluorescent tubes are set inside the handrails to direct light on to the deck. The lighting is supplied by cables tucked into ducts below the deck. □

CREDITS

PEDESTRIAN BRIDGE, LONDON

CLIENT London Docklands Development Corporation
ARCHITECT Future Systems: Jan Kaplicky, Amanda Levete, Angus Pond
STRUCTURAL ENGINEER Anthony Hunt Associates
LIGHTING Lighting Design Partnership
MECHANICAL ENGINEER Rendel Palmer & Tritton
SUPPLIERS
fabricator Littlehampton Welding, *deck* Hydro Aluminium, *cables* Mendip Manufacturing, *hydraulics* Solent Fluid Power

Cascades



CZWG Architects 1986–1988

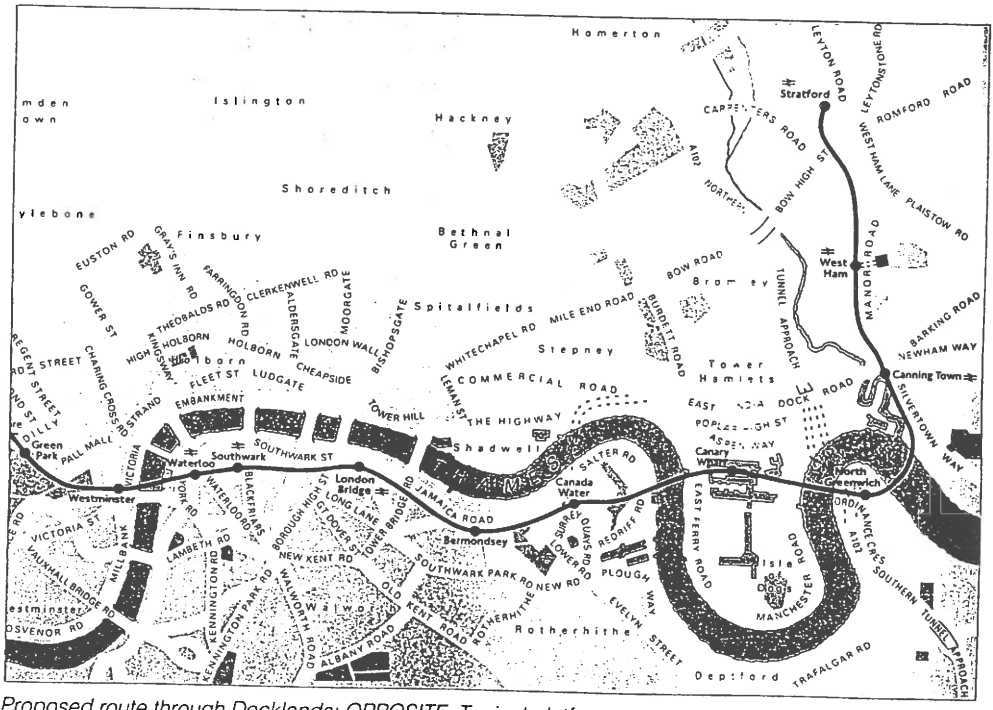
Cascades

Twenty storeys high, with water on two sides, Cascades holds its head up defiantly in the middle of low-lying Docklands. From a distance the block seems to be a formidable solid lump with an unusual leaning profile, but close up it becomes multi-faceted, made up of layers of windows, balconies, turrets, and portholes. The texture of the façades is a result of the plan. A spinal corridor runs through the centre, either side of which are one-, two- and three-bedroom flats set at angles to capture interesting views and light. The flats have deep open plans with small cabin bedrooms tucked at the back (nearest the corridor). The sloping side is the fire-escape stair enclosed in a long shed-shaped enclosure (like a greenhouse) with roof terraces each side. The view is spectacular. Facilities in the development include a swimming pool (at the bottom of the slope), gymnasium, conference room and some shops.

It has heen described as 'a castle for men and women of the right stuff', the types described in Tom Wolfe's novel, *Bonfire of the Vanities*. The block is a symbol of the 1980s' boom in finance and property. Young professionals as descrlbed above came to settle here. The site is convenient for getting to and from the City and was thought to be a good investment in the light of Canary Wharf, rising nearby. Now, many residents have become disillusioned as they are stranded in a location which still lacks basic amenities like a decent transport system.

ADDRESS West Ferry Road, London E14 [1C 80]
CLIENT Kentish Homes
CONTRACT VALUE £18.8 million
SIZE 164 flats
DOCKLANDS LIGHT RAILWAY South Quay
ACCESS none

CZWG Architects 1986–1988



Proposed route through Docklands; OPPOSITE: Typical platform section, Weston Williamson

LONDON UNDERGROUND LTD

JUBILEE LINE EXTENSION

Masterplan

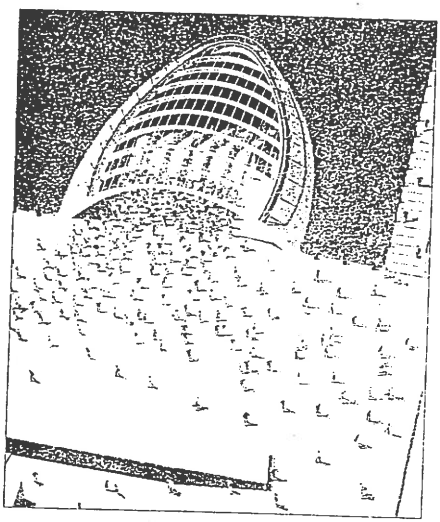
The new £1 billion Jubilee Line is heralded as the most important and innovative engineering endeavour currently under development in Europe. Completion is scheduled for 1996, in half the time normally anticipated for work of this complexity. The role of the architects and engineers is therefore exceptionally demanding. At a time when many public institutions, most notably the government, seem intent on downgrading the role of architects, London Underground's decision to involve some of architecture's big names was surprising and commendable. London Underground could have done without the services of outside architects, or it could have handed the project to a single firm with railway experience. However, Russell Black, brought in to head the project, decided on an imaginative approach and chose Roland Paoletti to select the architects.

Paoletti was faced with two alternatives: either to play safe and produce a set of stations, like the Victoria Line, only distinguishable by the decorative tile work, or to take a risk and make every station different. He decided on the latter, believing that it was important to exploit the differences and characters of each station, and then proceeded to choose a team which has made the architectural world sit up.

Architects in as great a number as this rarely come together on any project, and what makes the list particularly interesting is that there are no classicists or post-modernists among them. Paoletti admits that from the very start he 'tried to get architects, not fashionable ones, but with a technical bent. I didn't care whether they had railway experience as long as they were good at solving problems'.

The Jubilee Line extension architects want to make a break from London Underground's more recent attempts at architectural design. 'You only had to go and see stations like Euston, now being reclad, to know what not to do,' said one architect. Over the past decade, London Underground's busiest stations have been brightened up with a superfluity of garish platform tiles, easily vandalised seats and frazzling fluorescent lighting.

Paoletti told his architects: 'Instead of thinking how you decorate a station, think how you undecorate it. Wherever you can leave the civil works exposed, go for something simple and minimise the need for finishes.'



Butlers Wharf: Infrastructure

Conran Roche 1988–1990

Butlers Wharf: Infrastructure

Conran Roche has been leading a comprehensive revitalization strategy to rebuild the infrastructure of Butlers Wharf and restore many of its 17 Grade II listed buildings. The site, acquired in 1984 for a mere £5 million, is within the London Bridge Conservation Area. The overall plan is to build up a community where people will want to live and work again, with leisure, retail, office, residential and industrial facilities.

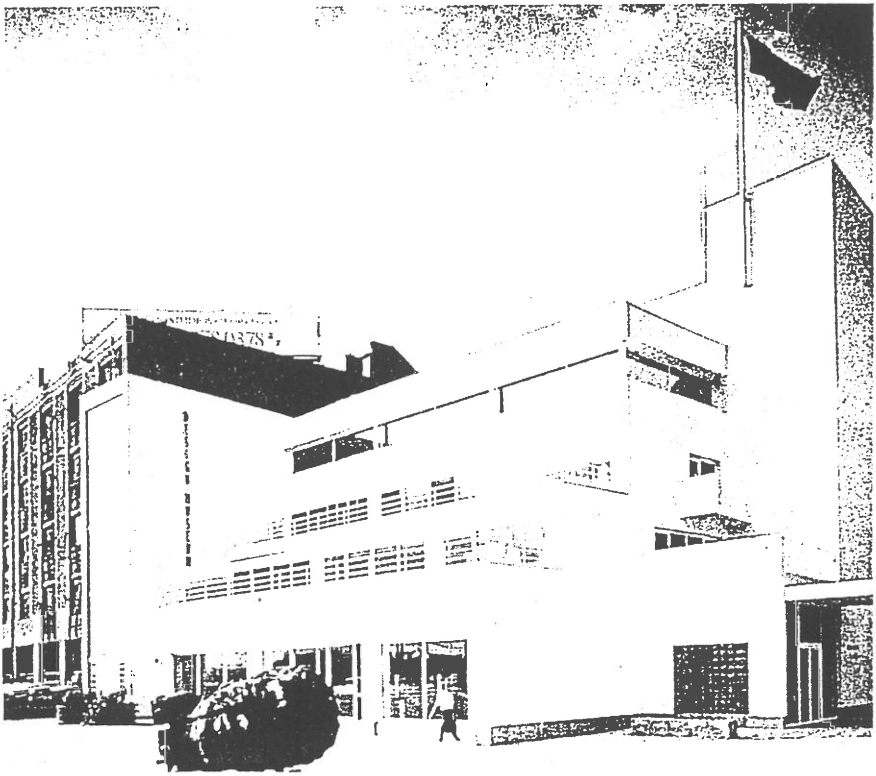
At the beginning of this century the area was occupied by flour, corn and rice merchants. Everything and everybody was covered in a heavy dusting of white powder. Many of the warehouses were then used to store spices, and a few of these are still in operation and have continued life as normal as building works have been carried out around them – you can still smell the pungent aroma of cinnamon and nutmeg as you walk down Gainsford Street. There is a peculiarly ghostly air as much of the area lies derelict, evoking the atmosphere of Charles Dickens's *Oliver Twist*. It makes the place infinitely more enticing as there are still bits to explore.

The infrastructure includes the pedestrianization of Shad Thames and Lafone Street, refurbishment of existing streets to increase pavement widths, and upgrading of street services, such as lighting. The quayside and river edge have been completely rejuvenated with York stone to provide a promenade and a pontoon to give access to the rather-too-infrequent riverbus service.

It does seem that a rigorous plan has been set out to integrate new activities into the rich but decaying building fabric. Diverse areas of society are already settling in – students from the London School of Economics live next to luxury apartments which sit next to deserted Victorian warehouses, a community nursery, workshops and the Design Museum. With the proposal for a 350-seat cinema on Curlew Street, this will definitely

Conran Roche 1988–1990

Design Museum



Conran Roche 1987–1989

Design Museum

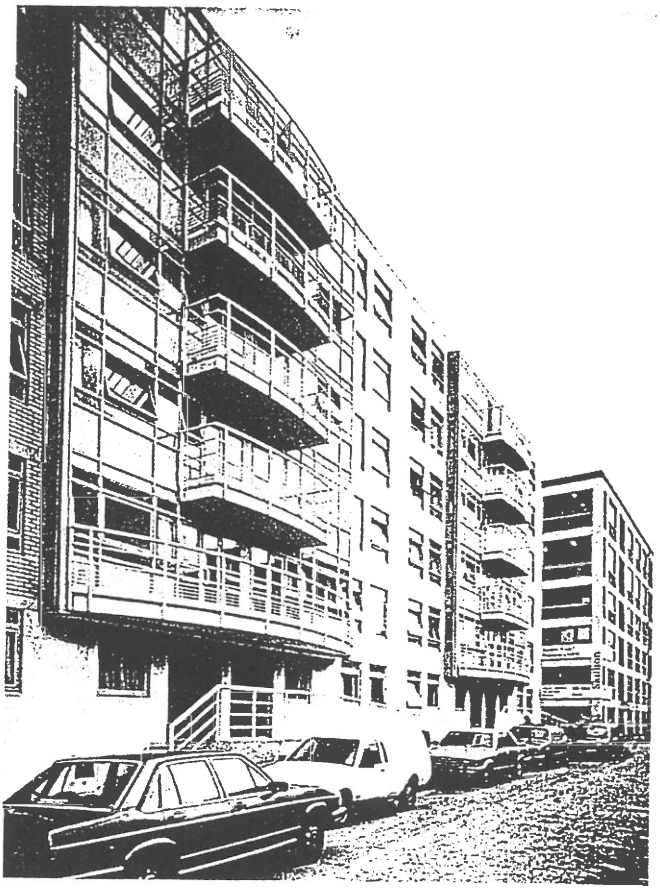
The Design Museum was set up by Terence Conran (founder of Habitat Stores and The Conran Shop) and Stephen Bayley to explain the function, appearance and marketing of consumer goods. The intention is to help to raise the awareness of design standards in everything from kettles to cars, from the earliest days of mass production. It also provides a resource to inform the work of the present-day design industry. It can be seen as a monument to the changing status of design during the Thatcher era. The objects in the museum are design classics which have now become cult objects – strangely contradictory.

The disused 1950s' warehouse overlooking the River Thames has been reconstructed to accommodate a permanent Study Collection with limited reference material available at interactive computer terminals, a space for temporary exhibitions, a library, a lecture theatre and the Blueprint Café. The project started as a refurbishment but it proved cheaper to demolish and rebuild much of the original building because of a new VAT ruling on all construction except new building in the 1984 Budget.

The Study Collection is housed on the top floor in a double-height space, saturated in natural light which causes the neutral English oak and marble floors and white walls to glow. The temporary gallery is the usual white space that can be changed to exhibit anything from the corporate logos of Raymond Loewy to the furniture of Eileen Gray. Both the interior spaces were designed by Stanton Williams.

The Blueprint Café, designed by Terence Conran, is the only facility that really makes use of the original building and its prime location, by employing the layered frontage. The entrance, up a wide white stairwell, rather like the echoing approach to a swimming baths, leads customers into the open café area with its glass frontage and a terrace overlooking the Thames. The proximity of the water and the coolness of the space

London School of Economics Student Residence



Conran Roche 1987–1989

London School of Economics Student Residence

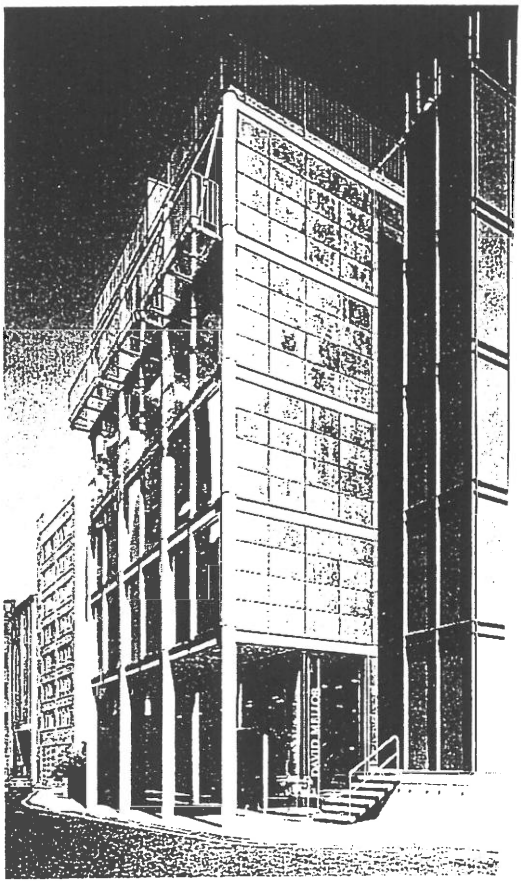
This is a six-storey building with 280 student rooms served by four separate cores – each stairwell gives access to a pair of flats at each level. One flat comprises six single study bedrooms with built-in furniture and storage facilities – although they are rather cramped it was essential to make maximum use of the limited space. Each flat has a communal dining/living area with a balcony which faces south on to Gainsford Street. The new block could be mistaken for more luxurious apartments but the orange plastic chairs and piles of laundry that spew out onto the balconies give it that authentic hall of residence feel.

It is to be hoped that other members of the community will respond to the student presence here and create affordable services for them, thereby enriching the diversity of the area. There is certainly no shortage of available space.

ADDRESS Gainsford Street, London SE1 [2F 79]
CLIENT London School of Economics
CONTRACT VALUE £5.3 million
SIZE 280 student rooms
TUBE Tower Hill – Circle and District Lines, walk over Tower Bridge
BUSES 42, 47, 78, 188, P11 to south side of Tower Bridge
ACCESS none

Conran Roche 1987–1989

David Mellor Building



Michael Hopkins & Partners 1990

David Mellor Building

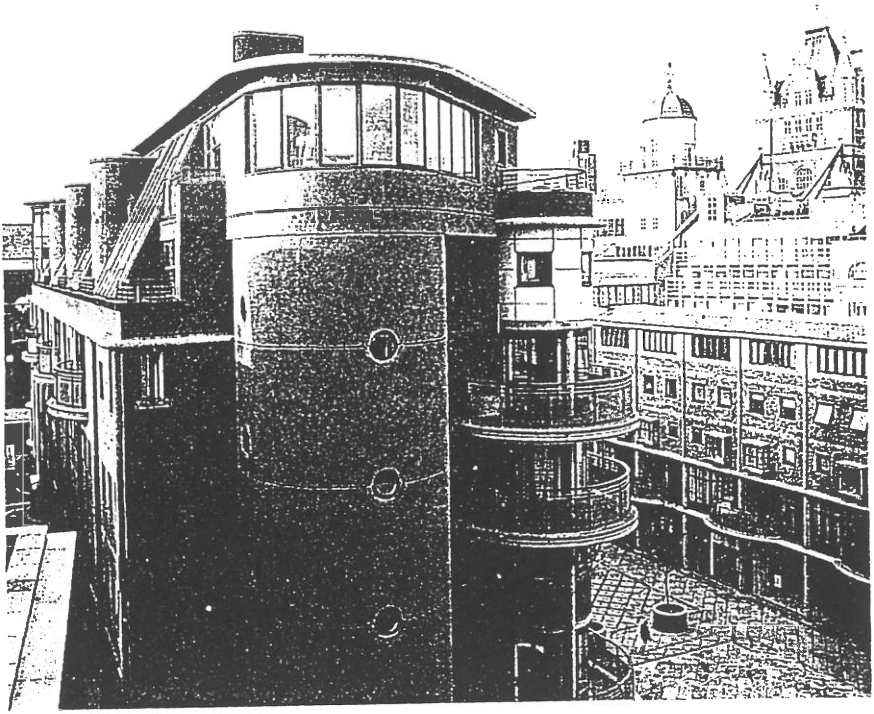
The David Mellor Building has been taken over by the Conran empire which domintes the area. It contrasts dramatically with the indigenous building stock as this project reflects the particular character of the original client. Mellor is to kitchen utensils what Terence Conran is to the rest of our homes. He had specific functions in mind for the spaces that were to be created, namely, a 3-metre-high glazed shop/showroom on the ground floor, with workshops and dimly glazed offices on the middle floors and a residence for himself high up on the top floor, in order to enjoy privacy and surrounding views of the dock.

Services are held in the gap between the main rectangular concrete frame of the building and Cinnamon Wharf on the north side. A solid, slate-grey stair tower is attached to the south side like the amputated limb of some much larger and more monstrous construction. The heavy slate effect is created by lead-wrapped panels hung onto the internal metal frame. Textured circular columns penetrate the glazed space on the ground floor. The materials used are not gleaming white and stainless steel as 1980s' kitchen etiquette dictates; the interesting way in which they have been used reflects an element of rural craftsmanship but on a factory scale (many of the items that were sold are made in Mellor's own factory in Derbyshire, also designed by Michael Hopkins). The Conran shop has had no trouble in adapting their look to the distinctive premises.

ADDRESS Shad Thames, London SE1 [2F 79]
CLIENT David Mellor
TUBE Tower Hill – Circle and District Lines, walk over Tower Bridge
BUSES 42, 47, 78, 188, P11 to south side of Tower Bridge
ACCESS to shop

Michael Hopkins & Partners 1990

Horselydown Square



Wickham & Associates 1989

Horselydown Square

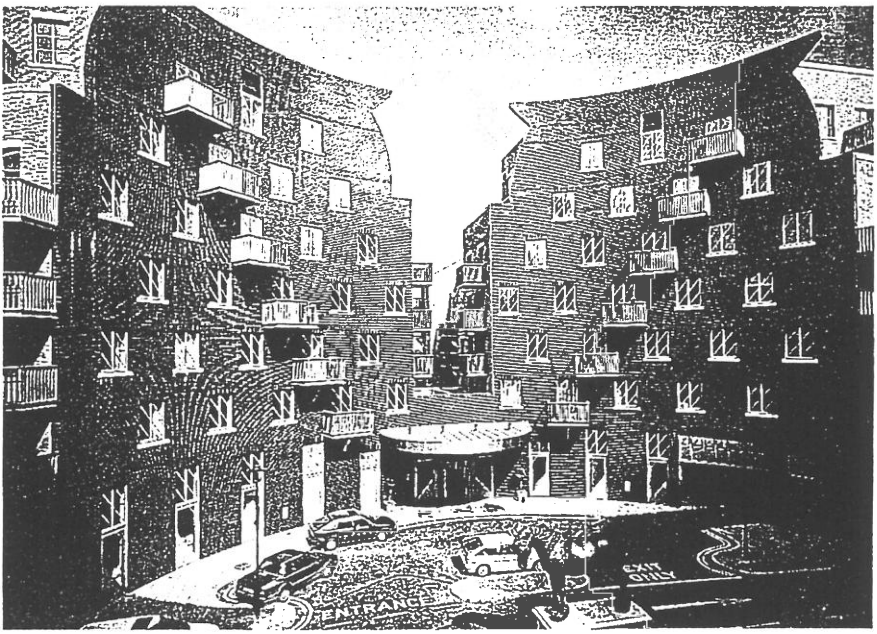
The scheme comprises four apartment buildings incorporating shops and two office buildings. The concept was the recreation of the character of traditional city planning by constructing a dense arrangement of buildings around two squares. At the centre of the main square is a fountain, designed by Tony Donaldson, surrounded by shops (most of them remain unlet so they have become makeshift galleries). The smaller square is cobbled, bringing together parts of the old city such as the Anchor Tap pub, and one of the new office blocks. The two squares are linked by a narrow passageway. The dense labyrinthine effect of the overall plan has also penetrated the design of the flats which spiral up to three storeys high, some with roof terraces or balconies and others culminating in turrets looking over into neighbouring streets. The exterior walls are rendered and painted terracotta and window frames are a brilliant blue.

All this sounds like you could be in the middle of an Italian hill town; however, the unlet shops and the distinct lack of domestic activity reeks of another quick shot in the arm for urban regeneration, all sewn up by providing a range of mixed-use buildings. You are offered office, retail and living space and the romance of Italy all done up in the same package. Rather like pre-packed sandwiches, whatever the filling, they all taste pretty much the same.

ADDRESS Horselydown Lane, London SE1 [17 79]
CLIENT Berkley House plc
CONTRACT VALUE £17 million
SIZE 14,200 square metres total
TUBE Tower Hill – Circle and District Lines, walk over Tower Bridge
BUS 42, 47, 78, P11 to south side of Tower Bridge
ACCESS to shops

Wickham & Associates 1989

The Circle



CZWG Architects 1987–1989

The Circle

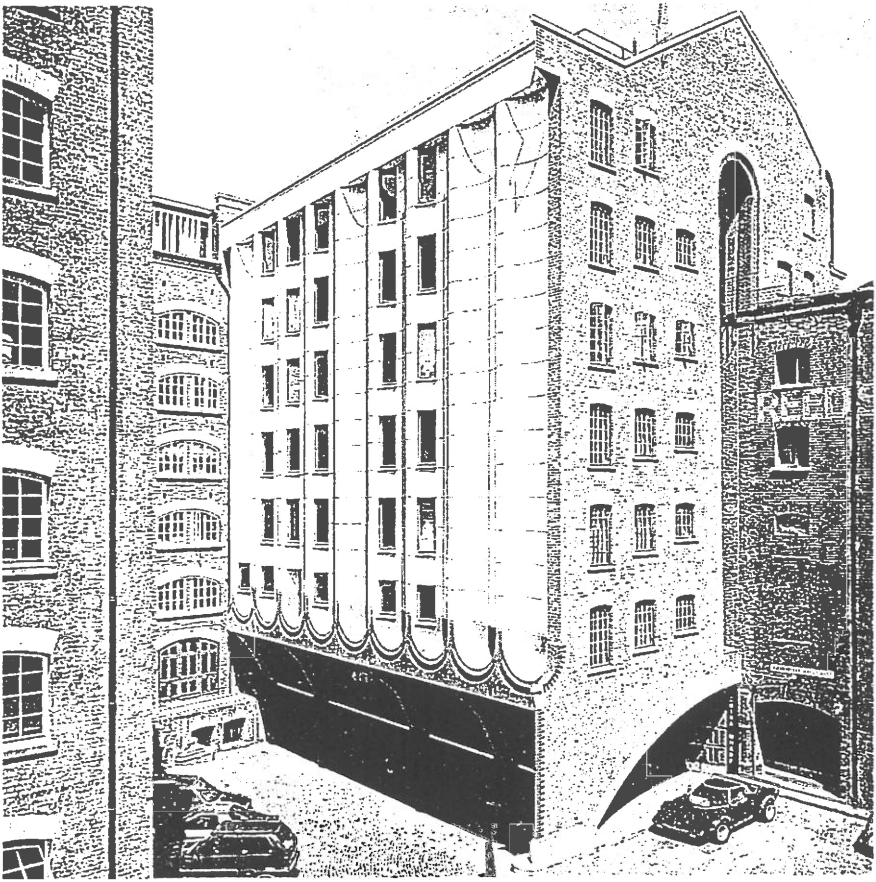
Approaching from either end of Queen Elizabeth Street, an unsuspecting visitor to the area will be ceremoniously engulfed in a vat of cobalt blue. Whilst deciphering whether one is in an interior or exterior space, tell-tale signs like the clouds above your head will indicate that this is simply a widening in the road. Appropriately industrial in scale, the glazed brick façades of this housing scheme form a circular courtyard (hence the name). The idea was to create more pavement in an area renowned for its unusual canyon streets – and a dropping-off point for cars, essential for the huge loads of shopping that residents amass from the out-of-town hypermarket, this being the only possible lifeline as retail units on the ground floor remain empty. The heavy cargo is then transported via one of two lifts in either the north or south lobby up to one of the seven storeys, along the corridor and into a conventional 1930s' prototype flat.

No decorative expense has been spared: diagonal glazing bars on painfully small windows and wavy brickwork parapets along street elevations. There is no disguising the fact that this project is simply a piece of superficial theatre. I half expected to be heckled by retired seamen from the bulky timber balconies that run diagonally up the façades, but there was no sign of such vibrant life. The Circle demonstrates that cosmetics are not enough to demonstrate or rethink a modern way of living.

ADDRESS Queen Elizabeth Street, London SE1 [2F 79]
CLIENT Jacob's Island plc
CONTRACT VALUE £32 million
SIZE 42,500 square metres floor space
TUBE Tower Hill – Circle and District Lines, walk over Tower Bridge
BUS 42, 47, 78, P11 to south side of Tower Bridge
ACCESS to shops

CZWG Architects 1987–1989

China Wharf



CZWG Architects 1988

China Wharf

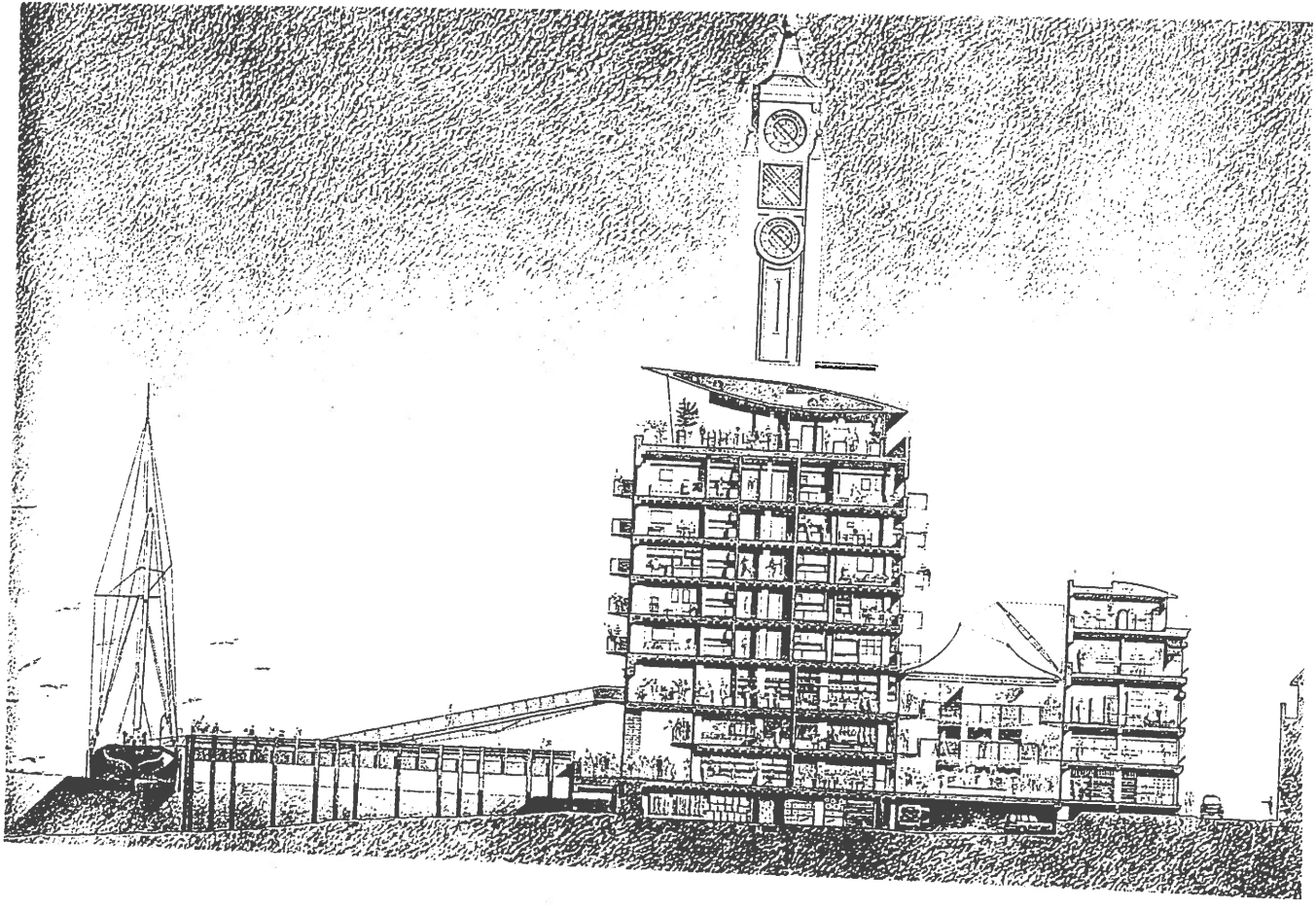
This was CZWG's first big apartment building and it has become quite a landmark on the River Thames. Wedged in between two refurbished Victorian warehouses, it has three faces which reflect the types of industrial building in the area. One street façade is of London stock-brick, matching Reeds Wharf next door. The entrance courtyard façade has a scalloped face faintly echoing the scale and appearance of the industrial silos which once stood nearby. Windows are twisted towards the sun and away from neighbours. The scooped bottoms of each scallop, painted bright red, have provided superior lavatory facilities for the local birdlife. The river façade is more pagoda (owing something to its name) than Victorian London, its bold red arches emphasizing the window type and then peeling off to provide visual support for balconies. The complicated interior is arranged on a scissor plan so that each flat has a view of the river and a private space at the back. The interior detailing is 1980s' kitsch, the exterior a Post-Modern cartoon.

ADDRESS Mill Street, London SE1 [2F 79]
CLIENT Jacob's Island plc; Harry Neal Limited
STRUCTURAL ENGINEER Alan Baxter Associates
CONTRACT VALUE £2.5 million
SIZE 1800 square metres
TUBE Tower Hill – Circle and District Lines, walk over Tower Bridge
BUS 42, 47, 78, P11 to south side of Tower Bridge
ACCESS none

CZWG Architects 1988

FRIDAY 25 APRIL

D 08.45	**Coach leaves from hotel.**	
A 09.30 - D 10.00	. OXO: Mixed use development (1996)	Lifschutz Davidson
A 10.15 - D 12.00	The City:	
	. Broadgate (1984 -1991)	Arup Associates / SOM
	. Ludgate (1992)	SOM
	. Bracken House (1991)	Michael Hopkins & Partners
D 12.00	**Coach leaves for Slough. Lunch on the way.**	
	If time permits: a detour to Stockley Park, Uxbridge.	
A 14.00 - D 15.00	. Thames Valley University, Library (1996), Slough	Richard Rogers Partnership
D 15.00	**Coach returns to London.**	
A 16.00 - D 17.00	. Thames Wharf Housing and Studios (1984 /1987)	Richard Rogers Partnership
	. The Deckhouse (1991)	John Young
	Introduction by John Young.	
A 17.30 - D 18.00	**Grab a pint at the River Café or a pub around the corner.**	
A 18.30 - D 19.30	. Riverside Offices and Apartments (1990)	Sir Norman Foster and Partners
	Introduction and tour by Paul Kalkhoven, partner at Foster and Partners	
D 19.30	**Coach leaves for hotel.**	



OXO

Once lined with grime encrusted warehouses, London's South Bank has gradually evolved into a modern cultural and commercial riverside strip. The stalwart functionalism of industry has given way to a heterogeneous assortment of buildings baying across the River Thames. Just east of the *béton brut* grandeur of the National Theatre and the execrable King's Reach Tower lies the Oxo building, preserved like an archaeological specimen as the sole reminder of the area's past life. Originally constructed at the turn of the century as a Post Office generating station, it was extensively remodelled as a meat warehouse between 1928 and 1930, acquiring, in the process, its famous Art Deco tower. Punctuated by a trio of glazed apertures that might look like innocuous noughts and crosses, they actually spell out 'OXO', the name of the British meat products company. Designed by A. W. Moore, this brazen appendage cunningly circumvented restrictions on advertising along the river and has now assumed the status of minor London landmark.

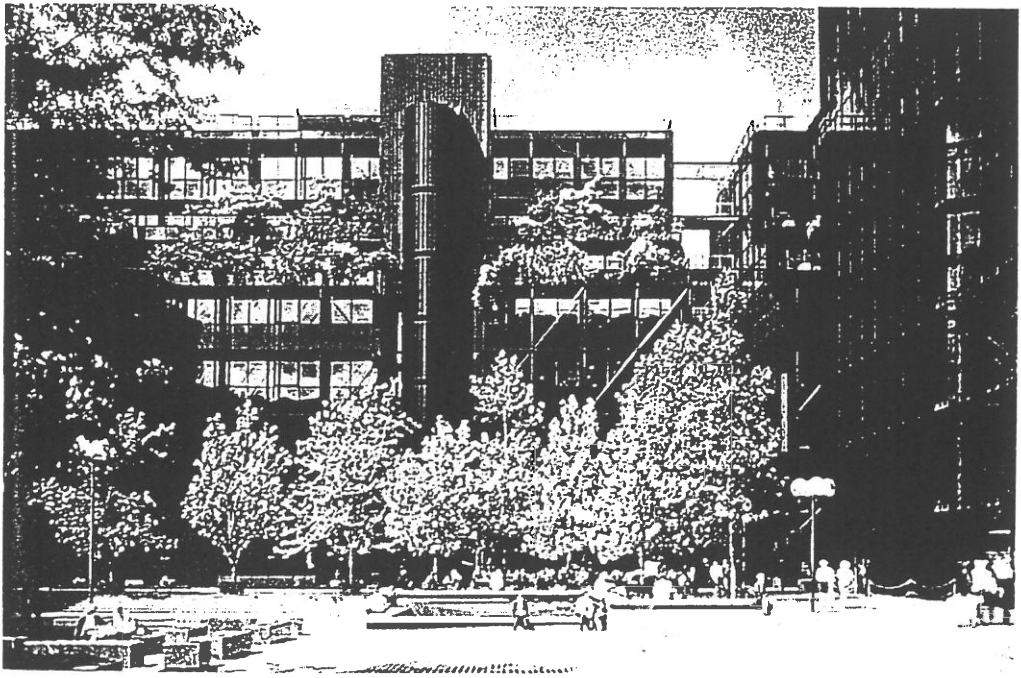
After a long period of uncertainty, the original building has now been inventively remodelled for mixed residential and commercial use. Five intermediate floors provide 78 flats for Coin Street Secondary Housing Association (occupied by people who either live or work in the local borough), while the lower three storeys have been refurbished to house designer studios and small speciality shops. On the second floor overlooking the dramatic sweep of the river from St Paul's Cathedral to Charing Cross Station, is a cheerfully demotic café designed by Apicella Associates.

Lifschutz Davidson's refurbishment strategy responds to the building's heroically muscular character. The old slate and lead roof has been removed and replaced by a new aerofoil structure which forms a delicate yet expressive lid to the monolithic building below. It also creates a stunning double-height space, now housing two smart metropolitan restaurants and a bar operated by Harvey Nichols. In summer patrons can spill out on to a vertiginous terrace with possibly the best dining views in London. The underside of the roof consists of ingenious moveable fins that change the colour of the ceiling from white during the day to an intense ultramarine during the evening. The colour change eliminates internal reflections at night as well as allowing variation of both the lighting and acoustic levels to create a highly 'responsive space. At night the restaurant appears as a seductively luminous volume perched on a dark cliff, marked out by the glowing Oxo minaret.

The range of new uses has been pragmatically reconciled with the constraints of the existing basic warehouse structure. Three new 10-storey circulation and service cores were inserted, one at each end and one in the centre of the building. The end cores visually contain the building's block-like mass, while the central core continues the vertical penetration of this mass by the Oxo spire. The riverside elevation responds to the scale and rhythm of the wharf typology. Old loading bays become doors opening on to crisply detailed new timber and metal balconies for each flat. Residential floors are organised around an east-west running spine corridor. Individual flats are simply planned and integrated with the existing structure. Below the flats are the commercial areas, consisting of cellular workshops and shops. Here, glazed frontages reveal the building's massive original columns. Galleries cantilevered off the edges of the floors combine with linking corridors around the cores to provide circulation around the units. Once fully occupied, the atmosphere should resemble a lively, cosmopolitan souk, drawing visitors down river from the existing Gabriel's Wharf craft market.

The second phase of the project will create more workshops, an employment training centre, a pub and management offices. The Oxo Tower building will be linked to the smaller adjacent Barge House building by a series of five fabric and glass tents. The enclosed intervening space will be used for a range of entertainment and public events. The meringue peaks of the tents are supported by steel pylons cantilevering off the Oxo Tower building, their trussed structure reminiscent of the original cranes fixed to riverside warehouses. The covered space will be surrounded by elevated galleries linked by moveable bridges and stairs, that can be repositioned as events demand.

Oxo's revival is based around an idealistic paradigm of genuinely mixed use, carefully inserted into the existing fabric. In reconciling the various public and private functions, there have been occasional conflicts of interest, but instead of a redundant husk, London's South Bank now boasts a splendidly restored building vigorously engaged with the life of the city. CATHERINE SLESSOR



Arup Associates, Skidmore, Owings & Merrill, Inc. 1984–1991

Broadgate

The City of London is the home of a strong international commercial power. During the 1980s, Prime Minister Thatcher's government deregulated many financial activities to open up a new age of international electronic trading. Banks and brokers merged, and started to demand a new type of office space with large floorplates, floor-to-floor heights big enough to accommodate under-floor cabling, spaces which could be flexible and able to cope with 24-hour operations and suitable for employees working under highly stressful conditions. The demand was met between 1985 and 1991 by the addition of 4.5 million square metres of office space in central London. Broadgate provided some 334,450 square metres of this space, equal to the amount of space provided by five Empire State Buildings.

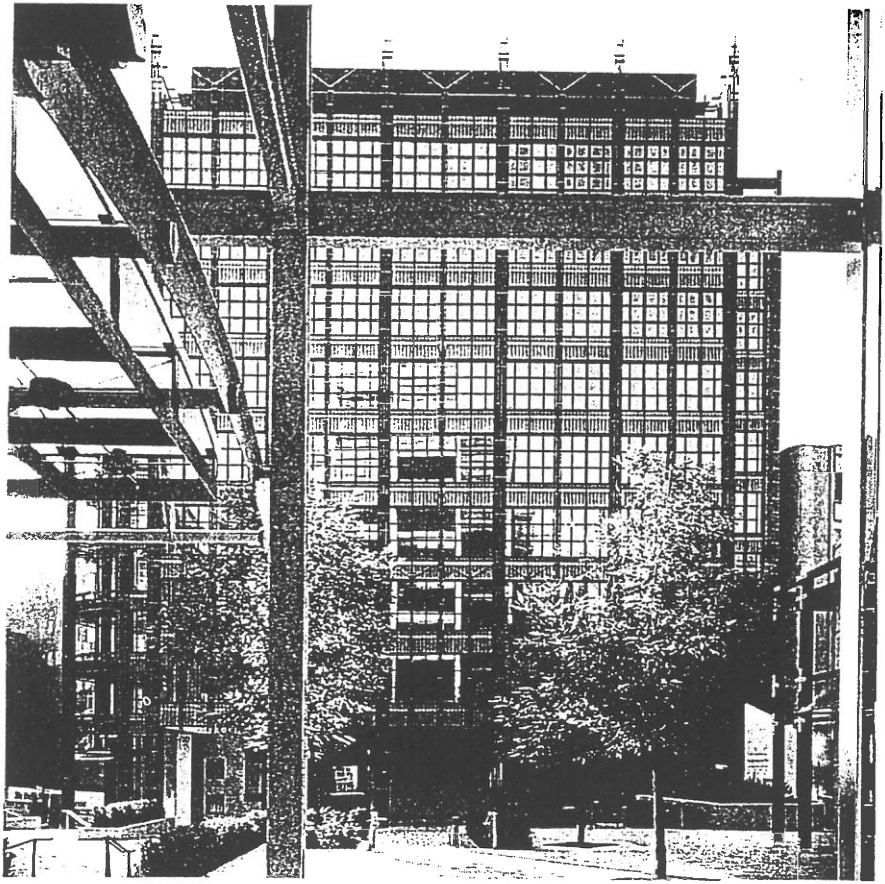
The site has for more than a century been a crossover point between the City and the influx of employees arriving at Liverpool Street Station. Globally, it sits between New York and Tokyo, providing a perfect base for foreign financiers.

Extensive research into client requirements revealed that North American office environments were admired: i.e. the face of the buildings should be extremely impressive, with big lobbies and atria, large open-plan office floors, and facilities that would enhance the lives of the employees, like outdoor spaces, restaurants, bars and a health club. All of these undertakings were achieved at Broadgate within the context of the medieval street plan and its listed buildings.

The whole scheme consists of 13 buildings and three squares, built in 14 phases. The first four phases were masterminded by Arup Associates. The plan was generated from the patterns of movement of people coming to the site from Liverpool Street Station. Each phase had to be built in 12 months, six years in all. The secret to this speedy building system was

Arup Associates, Skidmore, Owings & Merrill, Inc. 1984–1991

Ludgate



Skidmore, Owings & Merrill, Inc. 1992

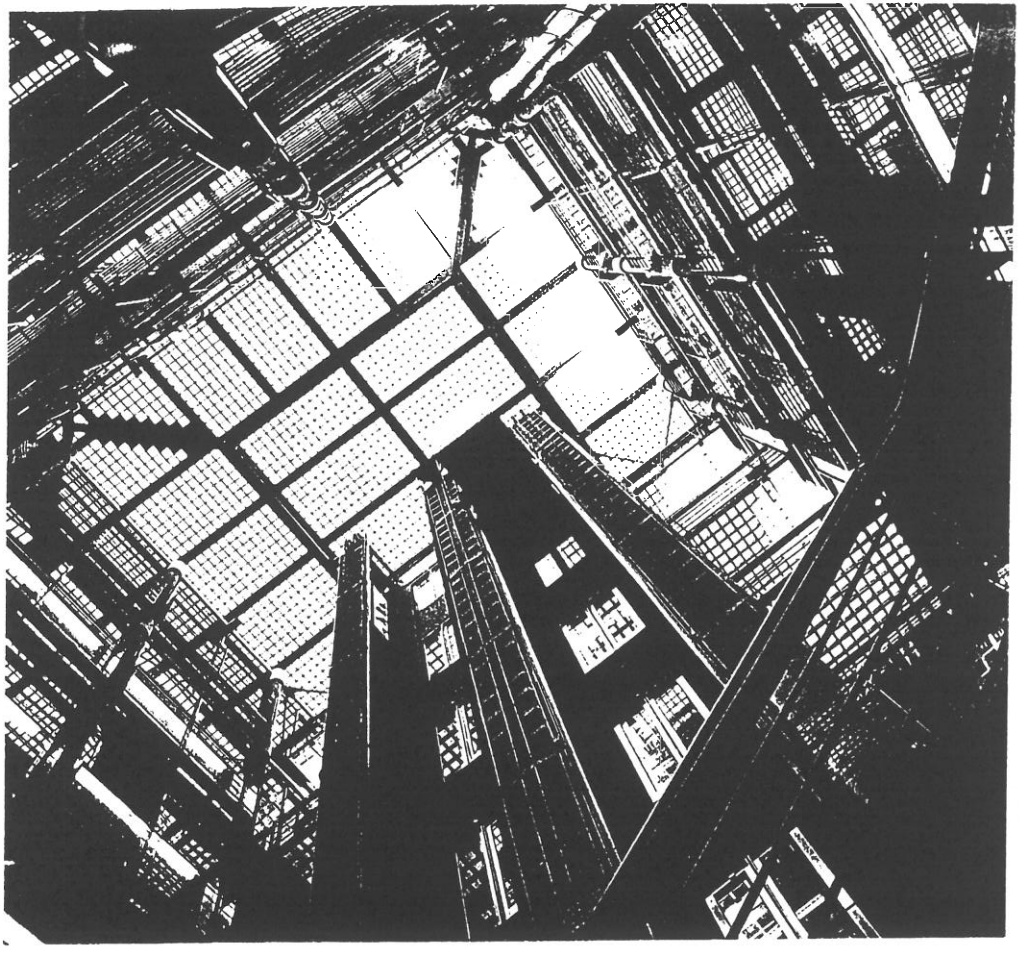
Ludgate

Ludgate is like a baby Broadgate, one sixth of the size and 30 per cent cheaper to build. Although from the same stable (Rosehaugh Stanhope Development), it is a more mature development than Broadgate. Having been conceived during the time of building mania in the mid 1980s (Broadgate was about building at speed), Ludgate has benefited from the necessity of trimming costs in the early 1990s. The buildings have become less ornate (less expensive tack) and more functional in plan and in appearance, making them easier to maintain. Costs were reduced by lowering floor-to-floor heights, reducing the thickness of external walls from 300 mm to 250 mm, and keeping central cores as small as possible.

The 1.5-km-long site straddles railway tracks going into Blackfriars. Trains were stopped for 17 days, in which time a viaduct was partly dismantled, a bridge was removed, the train tracks were realigned and a huge raft was constructed over the tracks to form the base of the development. All the buildings rest on springs which attenuate the vibrations from the underground trains much more than the usual Neoprene pads, making the movements less jarring and the buildings effectively bouncy! The courtyard between the buildings is occupied by a painted steel sculpture by Bruce McLean.

This project was an exercise in how to begin seriously cutting building costs and to work with less staff. There was even a pilot scheme to challenge the ritual of the British workman's tea break. Bovis, the construction managers, encouraged workers to take breaks at flexible times in 'satellite' canteens on site. To avoid a complete shutdown at 9.00 when all the workers went off to the café for breakfast, it was suggested that breakfast be served on site in order to start work at 8.00, thus keeping the employees at work 20 per cent longer each day. Goodness knows what effect this precedent would have had on British greasy-spoon culture.

Skidmore, Owings & Merrill, Inc. 1992

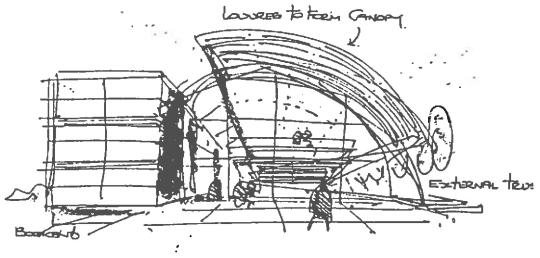


so that no added fire protection was required, hence the exposed material on the outside. Ceiling fixing plates on the inside indicate where brackets connect the outside structure with the inside floor slabs.

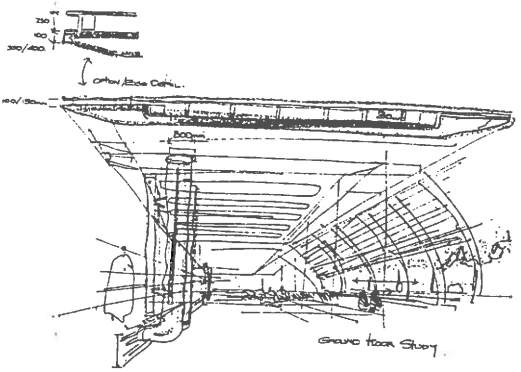
Bracken House is technically very creative and materials have been tested beyond decorative roles, but on the face of it, it is heavy and rather dreary. Not only is it squeezed from the sides, but St. Paul's has squashed it with its big foot too.

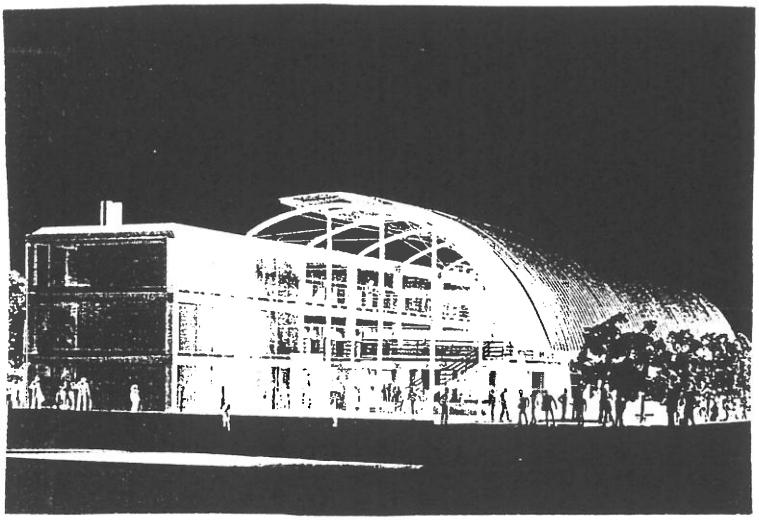
ADDRESS 1 Friday Street, London EC4 [7C 62]
CLIENT Obayashi Europe BV: Harakazu Nakamua
STRUCTURAL ENGINEER Ove Arup & Partners
TUBE Mansion House – District, Circle Lines
BUS 9, 11, 15, 17, 76, 513 to Mansion House
ACCESS none

Michael Hopkins & Partners 1989–1991


LOUVRES TO FORM CANOPY
EXTERNAL TRUS
BOARDWALK

Sketches


GROUND FLOOR STUDY



Thames Valley University

Rogers: This is a very small building. We had decided to do it even though it's rather on the small side for our practice.

GA: When you consider new projects do you consider the scale of the job? For example, is there a minimum size job to which an office of your size can bring interesting structural ideas.

Rogers: We consider the interest of the project first. But size can be a problem because if it's a low-fee job it can be difficult to find the money for the job. In an office like ours it's important that we have some smaller projects. They're faster, they have a different rhythm, and they keep us awake sometimes. Something like Terminal 5, which is a ten-year project, is very heavy. We presented this project six months ago and it will be built in a year. So it's an eighteen-month project and that's very good for the spirit of it. We can test things out and we can see the results.

GA: What were the conditions like around the site?

Rogers: The site is horrific, unlike Yokohama which is very beautiful. It's in a town called Slough, one of those industrial suburban towns that every city has. I call it "sloth" because it sounds more appropriate.

It's important to me because Thames Valley University is a new university, and our office is very keen on education and library research facilities.

The client is also very interesting. We have a very good director at the University, and Paul Hamlyn who is the chancellor of the university is also very interesting. The whole educational establishment is very interesting.

However, there's very little money because it's a classic English university where money is minimal. So the project is really just a shed—a lean-to practically. There are two parts, one is where the stacks are, and this serves the major reading spaces, and the reading room. You could really divide it into the servant activities and the main space they serve.

GA: The structure is extremely simple isn't it?

Rogers: It's metal cladding on a very simple beam structure which leans against a concrete frame with glass and steel mesh over the glass. It's a tough area, a lot of windows get broken. The two ends are just glass and there's also a pool. People reading will be able to see the reflecting pool.

It's the simplest of buildings. There will be some works of art along the approach past the university entrance. Then you arrive in the reading room.

I think it's been a successful small project. It's the sort of job I would like to have more of, but people don't tend to come to us for small jobs.

GA: Is this structure designed with Ove Arup & Partners?

Rogers: Yes.

GA: I saw a similar building at Foster's office, a library for Cambridge.

Rogers: That project is much larger, this is tiny. But we often do similar things.

GA: When you have to consider the budget and create a simple structure, the final design might often result in similar forms.

Rogers: Yes. In this case, a lean-to shed. There's a tradition in England. What we call a lean-to is when we have an existing structure and somebody just leans a garden shed against it. It happens in many gardens where you have an existing structure. This project had no existing elements but the idea is similar. There's very little money and it's actually a very easy way of responding to the different activities. There are two clearly different activities. One is a space where people will enjoy themselves, which has a staircase and great hall. The other is a very functional warehouse. It's as simple as that; it's a diagram that could be sketched on the back of an envelope.

Also I should mention that there are a lot of cars. So the building is made to look toward the water. You have a wall and then a lean-to.

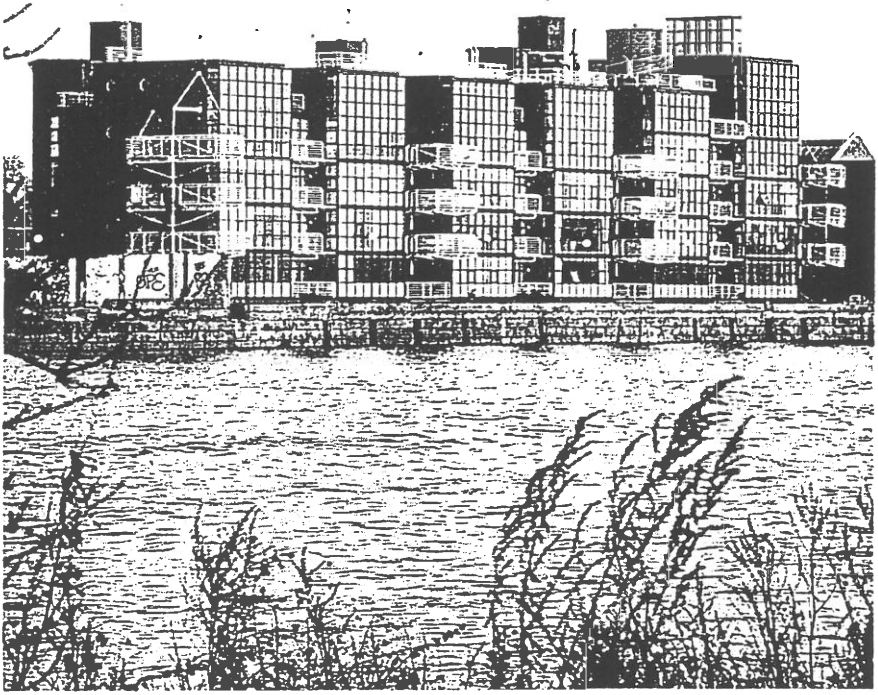
Part of it is a concrete structure with glass panels. It's so simple. Because we need shading and because it is a tough area we have put galvanized steel grill over all the glass.

GA: The elevation is quite industrial. Does this mean you don't concern yourself too much with the context of the university?

Rogers: Well, the old campus is a mess. We have every shape of building that ever existed. It used to be a technology center; it's a new university but it was used before as an education center built at the end of the 50s and was built piggly wiggly. You have little blocks, tall blocks, low blocks and so on. So this building is meant to be a little world on it's own.

Client: Thames Valley University Site: Slough, Surrey, England
Program: learning resource centre, library Design and construction period: 1994–1996
Structural system: in situ concrete frame Area: 3,500m² General contractor: Lang South East Structural and service engineers: Buro Happold Quantity surveyor: Hanscombe Partnership Landscape: Edward Hutchinson

Thames Reach Housing and Thames Wharf Studios



Richard Rogers Partnership/Lifschutz Davidson Design 1984–1987

Thames Reach Housing and Thames Wharf Studios

This was once a Duckham's Oil depot, housed in two Edwardian brick warehouses with a 1950s' concrete block slung on the eastern end of the site. Rogers chose the 1950s' block for his own offices. The glass and steelwork was reconstructed but the essence of the building remains the same, i.e. the huge floor plates and the spectacular view across the river. There are windows on three sides of the building with the service core in the centre. The distinctive glass barrel-vaulted roof is a later addition, designed by Lifschutz Davidson Design.

The middle warehouse has been converted into workshop-type office spaces which are mainly occupied by designers and craftsmen. The River Café is on the ground floor, opening onto a garden terrace on the river front. The warehouse to the west has been turned into apartments. All the original load-bearing brick and blockwork remains the same, not an approach which is instantly associated with Rogers' previous high-tech record, but the white painted steel balconies, balustrades and walkways strapped onto each block are undoubtedly his.

The client played a prominent role in the design of the housing block, having a clear idea of the demands of the up-market residents being targeted. The dull interiors were contracted out to a more conventional interior designer. However, the river frontage is spectacular, with glazed curtain wall façades facing south west. Venetian blinds and natural through ventilation combat solar heat gain. The glass-brick tower which projects upwards from one of the blocks is part of John Young's private apartment (see page 32).

Rogers' theme is the creation of a community with shared public facilities and open-plan living and working space. His office is a community in its own right with the café and crèche for its employees. The lettable

Richard Rogers Partnership/Lifschutz Davidson Design 1984–1987

The Deckhouse

Heathrow to Hammersmith

John Young 1991

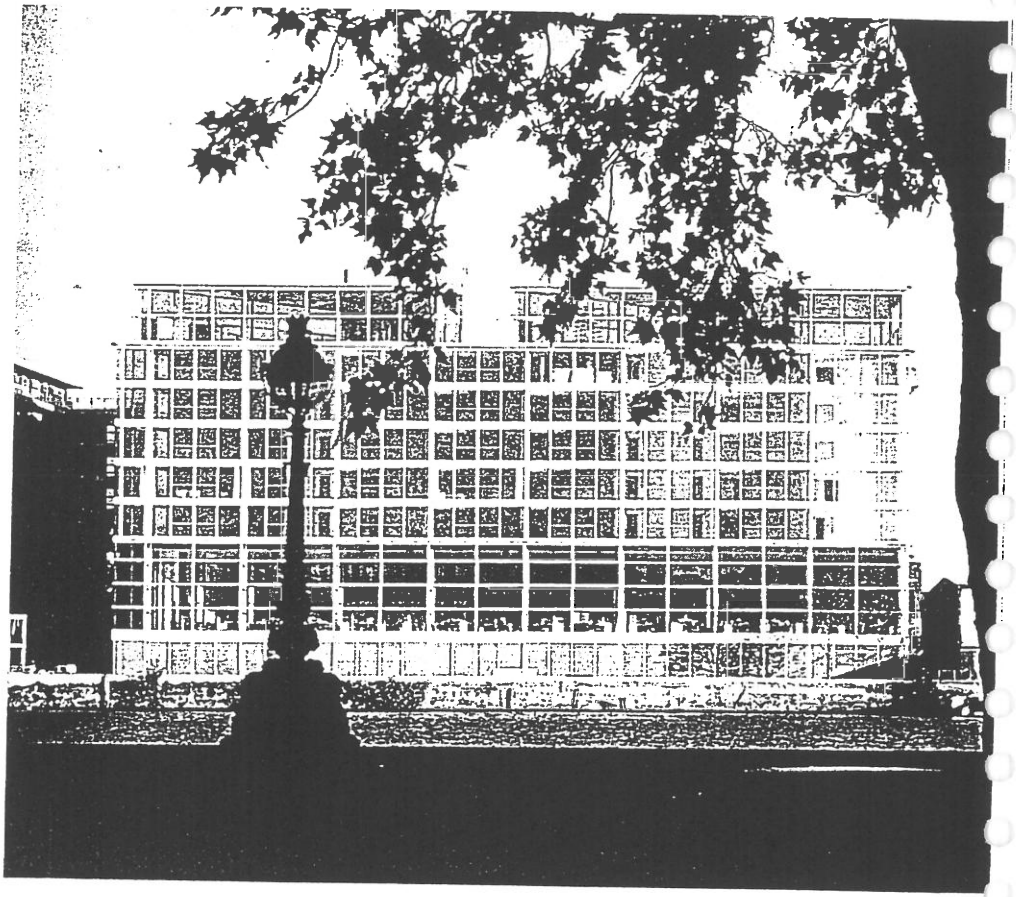
The Deckhouse

This private apartment, designed and owned by John Young, a partner in the Richard Rogers Partnership, is a complete exercise in industrial/nautical high-tech applied to a domestic situation. Every aspect of the apartment is obsessively thorough in its detailing, from the industrial coiled heating units on the wall to wire balustrades and gleaming stainless-steel fittings, each one a beautiful object in its own right. A south-facing, double-height glazed curtain wall exposes the living quarters (an open-plan dining/living room with a mezzanine bedroom level at the back) to the river, making the spectacular view a prominent part of the interior.

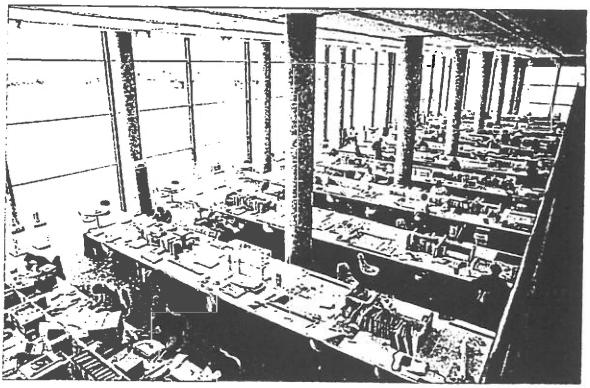
The bathroom tower is another spectacular *Blade Runner* feature and can be seen from the exterior poking up from the roofline. The focus is a sunken bath set in a polished screed floor in the centre of the round room. The walls are of glass brick and the ceiling is clear glass so light pours in from all around and there is a view of the heavens from the tub. Furnishings have been kept to a minimum, a few modernist chairs around a glass table. The building that has emerged is not necessarily new in terms of form (Pierre Charreau seems to have been a strong influence here), but the sum of the immaculate details and the hierarchy of rooms has created a total architecture.

ADDRESS 9 Thames Reach, Rainville Road, London W6 [6E 74]
CLIENT John Young and Marianne Just
STRUCTURAL ENGINEERS Hay Barry & Partners/Ove Arup & Partners
TUBE Hammersmith – Piccadilly, District Lines
BUS 9, 10, 27, 28, 31, 49, 391 to Hammersmith Broadway
ACCESS none

John Young 1991



Foster Associates 1990



Riverside Offices and Apartments

A simple concrete and glass structure located on an industrial site between Albert Bridge and Battersea Bridge with a spectacular riverside frontage; an entire working, living and relaxing environment has been created, looking its best when illuminated at night.

From the crumbling back-street approach, one is transported into a crisp, white atmosphere. At the top of a grand flight of stone steps the receptionist sits behind a Nomos table, employees take coffee at the bar seated on Foster barstools, viewing the elegant reception/gallery space and the main office and river beyond.

Huge 'dinosaur' tables stretch out across the vast light-filled studio floor. Each workstation accommodates whole project teams, storage for their drawings and a Totem (a vertical post designed by Foster to house electricity, computer and telephone sockets). Extra meeting tables, Eames' wire chairs and project models are displayed along the glazed river frontage. On the south side a mezzanine floor houses an audio-visual room, slide and technical libraries above with sound-proofed machine workshop and computer rooms below. The main library is fitted to the length and breadth of the back wall, light diffused here by fritted glass.

Upper floors are occupied by glass-fronted luxury apartments with the architect's own home atop the vigorously Foster-designed empire.

ADDRESS 22 Hester Road, London SW11 [7C 76]
CLIENT Petmoor Developments
STRUCTURAL ENGINEER Ove Arup & Partners
SITE AREA 4000 square metres
BUILDING AREA 2000 square metres
BUS 19, 45A, 49, 249, 349 to south side of Battersea Bridge
ACCESS none

Foster Associates 1990

SATURDAY 26 APRIL

D 09.00	**Coach leaves from hotel.**	
A 09.30 - D 10.30	. Waterloo Station International Terminal (1993)	Nicholas Grimshaw and Partners
	. Charing Cross Station (1990)	Terry Farrell & Company
A 11.00 - D 11.30	. Channel 4 Headquarters (1994)	Richard Rogers Partnership
A 11.45 - D 12.30	. Natural History Museum	
	Ecology Gallery (1991)	Ian Ritchie Architects
	Dinosaur Gallery (1992)	Ron Herron @ Imagination
	Wonders (1993)	David Chipperfield Architects
A 12.30	**Individual programme for the afternoon.**	

Museums and galleries

. Clore Gallery, The Tate Gallery Millbank SW1	Stirling & Wilford
. The Sainsbury Wing, National Gallery, Trafalgar Square WC2	Venturi, Scott Brown
. Sackler Galleries, Royal Academy Piccadilly W1	Foster Associates
. Osho Gallery, The Economist Building, St James's Street SW1	Stanton Wiliams
. The Lisson Gallery, 52 Bell Street NW1	Tony Fretton

Bookshops for architectural/art books

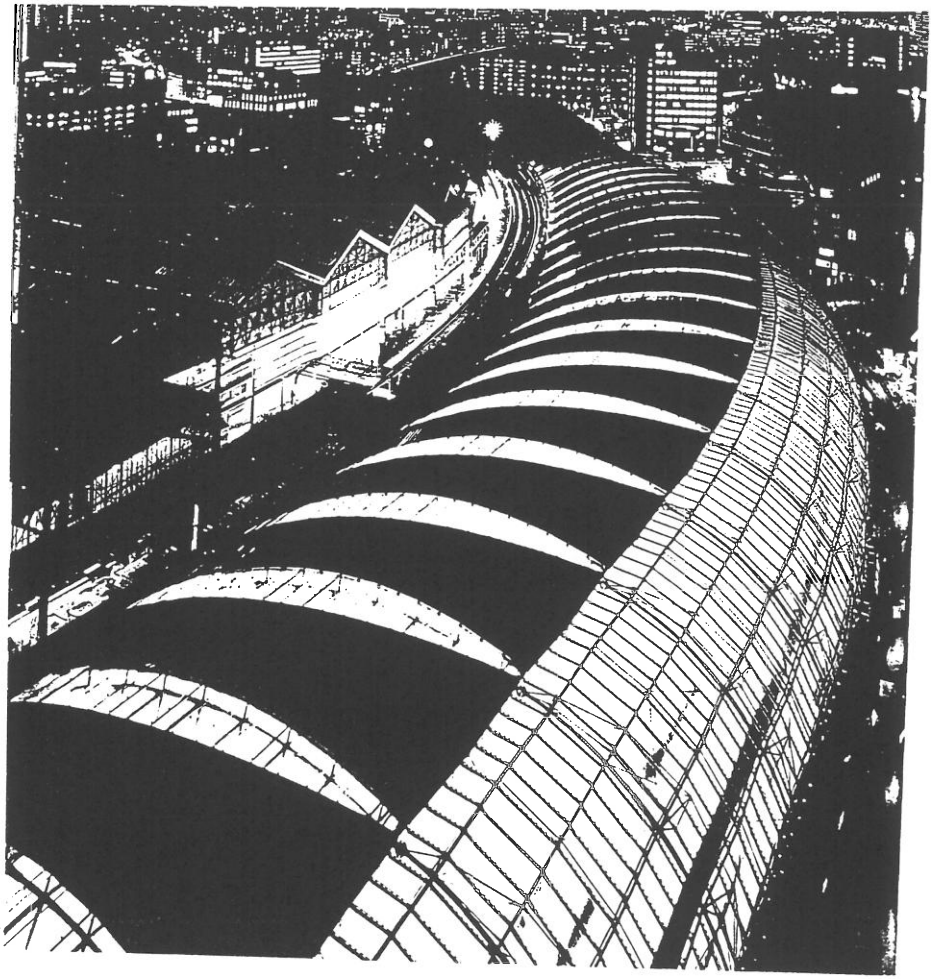
. Triangle Bookshop at the Architectural Association
36 Bedford Square WC1

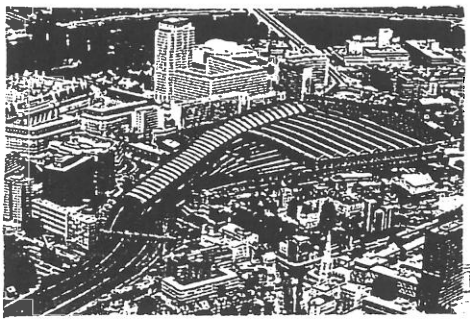
. RIBA Bookshop at the RIBA building
Portland Place W1

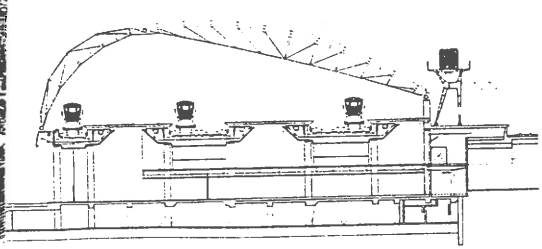
. Waterstones
Kensington High Street W8
Charing Cross Road WC2

. Foyles
Charing Cross Road WC2

Shops and restaurants (see enclosed lists)







Waterloo International Terminal

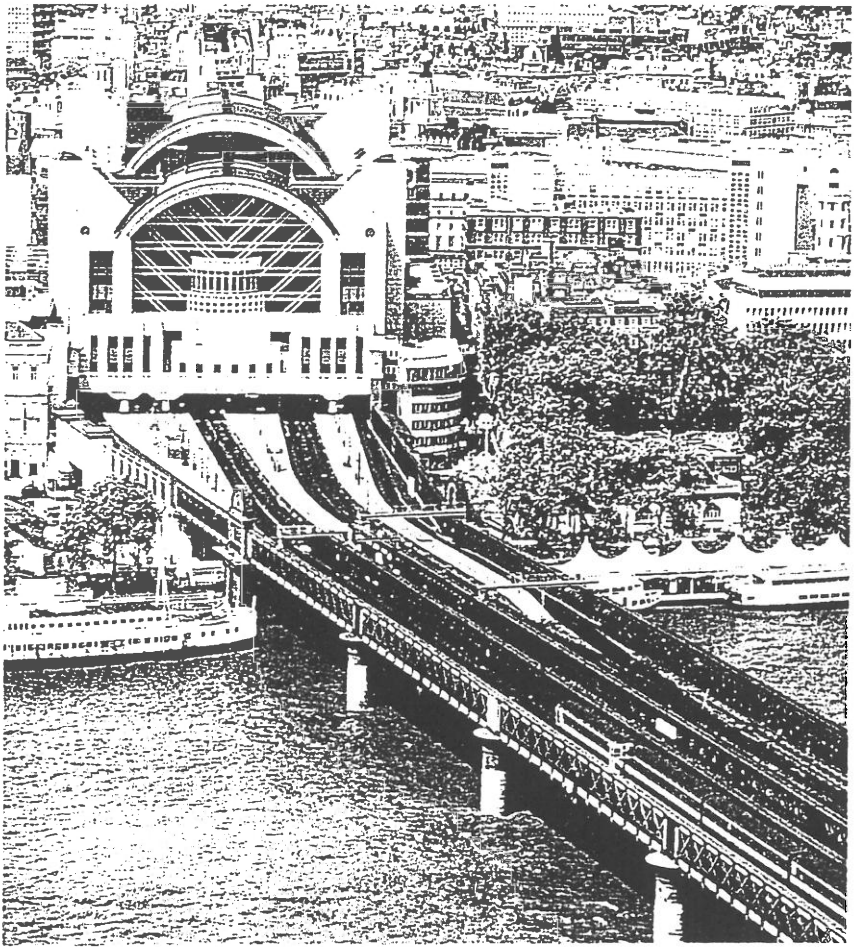
'The Gateway to Europe' is one of the longest railway stations in the world, with the capacity to handle up to 15 million passengers a year, due to open in July 1994. The architects' ambition was to capture the heritage of heroic engineers such as Isambard Kingdom Brunel, who created large-span, iron-roofed railway stations over a century ago, and to celebrate the Channel Tunnel rail link to the rest of Europe.

Five new tracks were set out by British Rail; these determined the geometry and shape of the whole scheme. The new building is made up of four components. At the bottom, a reinforced-concrete box accommodates the car park which spans the Underground lines and forms the foundation for the Terminal. On top of this concrete box sits a two-storey viaduct supporting the 400-metre-long platforms. This part must bear the weight of the 800-tonne trains and their braking force. Thirdly, brick vaults beneath the existing station are being repaired to accommodate back-up services. The fourth and most prominent component is the roof, although it only comprised 10 per cent of the overall budget. It extends the full length of the 400-metre trains, providing shelter for all the passengers like a vast scaly sleeve. Unfortunately, it does not crash into the existing patchwork of railway sheds but stands an awkward distance from the main Waterloo entrance. However, it happily disregards apartment and office blocks along its length, clipping the corners of any buildings that stand in its way.

The complex structure is essentially a flattened three-pin bowstring arch, distorted to follow the curve and changing width of the platforms. A series of diminishing compressive tubes are employed to cope with any movement. Pressed, profiled, stainless-steel tapered tubes define the bays and give expression to the lightweight structure. In order to avoid cutting 2520 panels of glass to size, at vast expense, a 'loose-fit' glazing system

Nicholas Grimshaw and Partners Limited 1991–1993

Embankment Place: Charing Cross



Embankment Place: Charing Cross

The primary development of this strategic piece of city planning is 32,000 square metres of office space using the air rights above Charing Cross Station. It is one of the most prominent sites in London. Seven to nine storeys are suspended above the tracks, insulating the offices from the clattering railway. While nine pairs of columns grew out of the platforms to support lofty bowstring arches, working hours were restricted to between one and four in the morning so that the 120,000 people that pass through the station daily could continue to do so undisturbed.

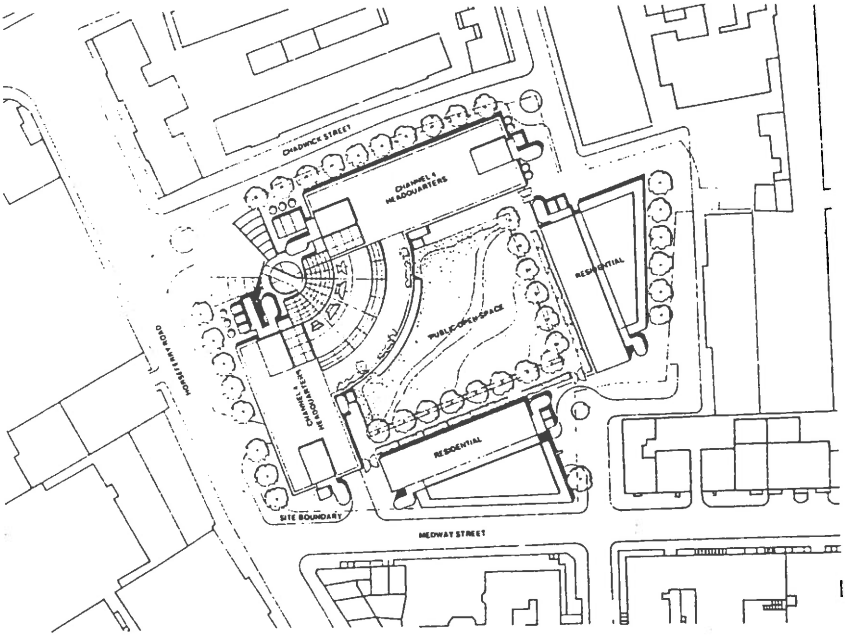
The masterplan extends to 'traffic management' (Cardboard City clearance) in Embankment Place, the extension of the Hungerford Bridge onto the concourse of Charing Cross Station (an intimidating blind passageway which then thankfully opens out with views on to Villiers Street), the relocation of the Players' Theatre, adjustments to Embankment Gardens and to the station forecourt, and the revitalisation of Villiers Street into a busy pedestrianised shopping and eating thoroughfare. Craven Passage, beneath the station, has also been hosed down and transformed into a shopping arcade – still largely vacant.

Design details are consistent, from ornament right through to finishes, continuing with the pretence that brick cladding reflects the street scale and granite cladding reflects the scale of the other riverside buildings. Cartoon-like classical references can be found in many of the decorative motifs such as the bulging Doric columns on the platforms and the pale green metalwork mimicking copper roofs. The giant glazed railway-shed arches crouch between service towers positioned at the four corners. At the top of each tower is a stunning and unique view across London – unfortunately reserved exclusively for the occupants of executive suites.

New exits are currently being made at the river end of the platforms so that there is direct access from Embankment Station and Whitehall.

Terry Farrell & Company 1987–1990

Channel 4 Headquarters



Richard Rogers Partnership 1991–1994

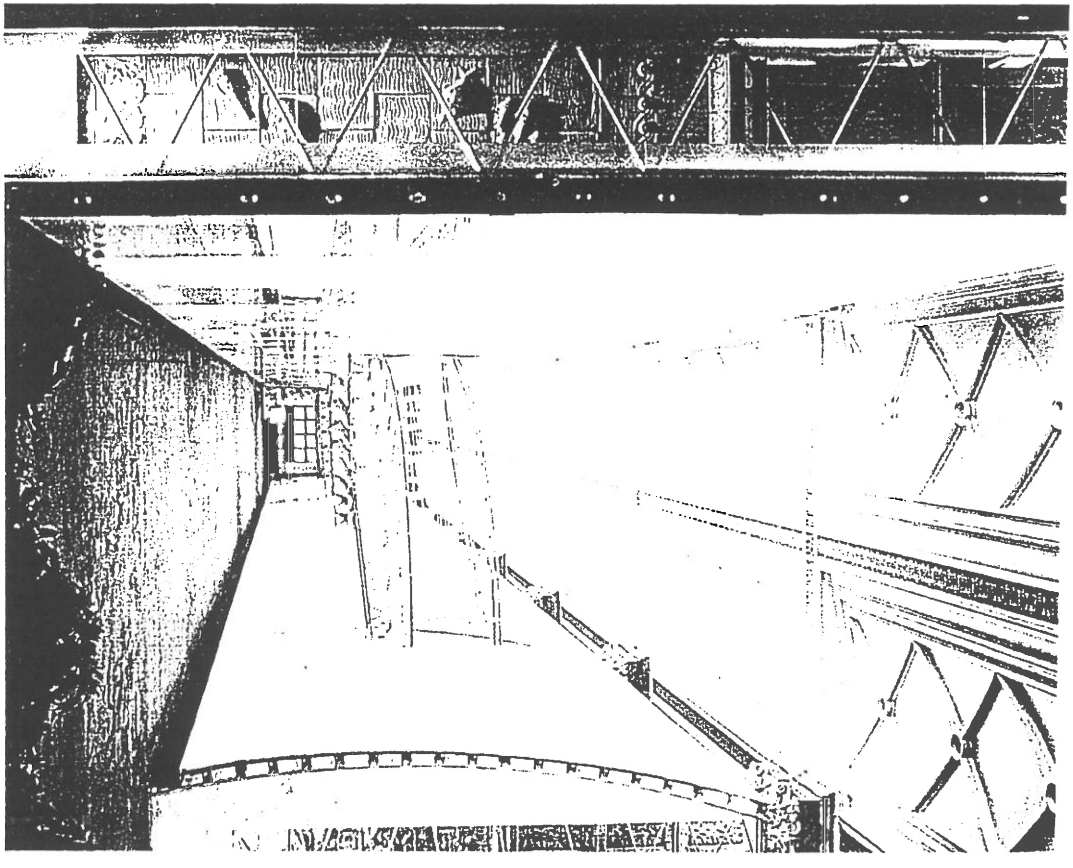
Channel 4 Headquarters

This is a key modern building in the heart of Westminster. Situated in a stagnant corner of Victoria (boldly moving out of the Soho/West End media clique), the Channel 4 building will assist in generating a new spirit in the area. The territory is stalked by the colossal 1960s' Department of the Environment blocks waiting on Death Row, the now rotting corpse of what was Westminster Hospital, the charmless DSS office just down the road and the Royal Horticultural Society buildings (1904 and 1928). Not exactly showbiz potential! However, this new building, comprising a major underground car park, TV studios and offices, a residential development of 100 apartments (by Lyons Sleeman + Hoare) and garden square, should make a considerable impact on its business and residential neighbours by introducing a lively industry to the area which in turn will generate new resources.

In plan, there are four wings around a central garden. The northern and western sides are occcupied by Channel 4 and the southern and eastern sides are residential blocks. The L-shaped offices butt up to the street but a generous recess into the corner has been given over to a dramatic entrance. The approach is across a bridge over what appears to be a glass pool, but is actually the roof to an underground studio. To your left is a stack of boxes (conference rooms) held in an elegant framework of tapered beams; to the right exterior lifts cling to a service tower and transmission antennae (the feather in the cap). The entrance itself is through a concave glass curtain which appears to be hung from a row of curtain claws (as opposed to curtain rings) draped between the two wings and allowing a glimpse of the reception, restaurant and garden beyond.

The exterior walls of the office wings are largely made up of glass and glass blocks, in lower areas clad in a mesh screen to reduce solar gain but

Richard Rogers Partnership 1991–1994



Ecology Gallery, Natural History Museum

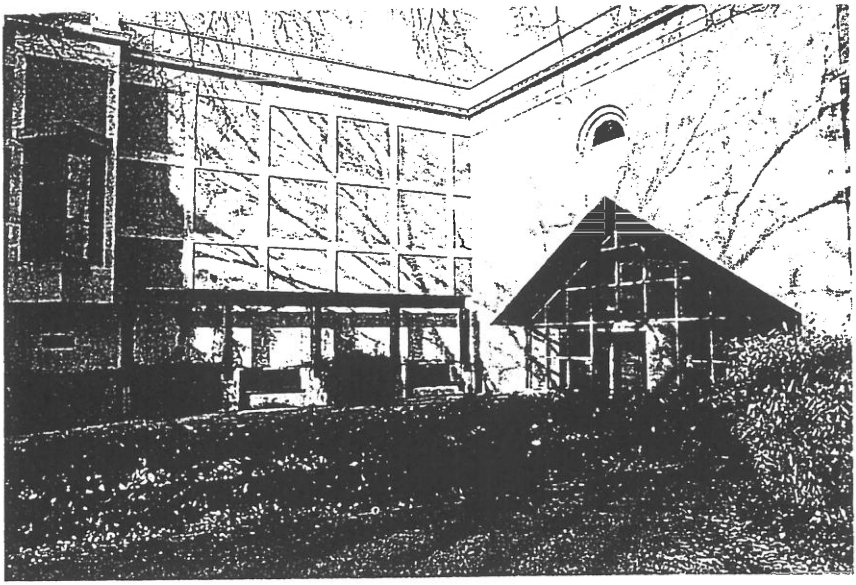
The gallery accommodates the new ecology exhibit in a chasm of Opti-white glass, illuminated with coloured lights to create the illusion of fire, water and a sheer glacial wall. Clear strips are cut into the walls, like rubbing the frost off windows, to reveal exhibits and parts of the existing building. Look out for literary quotes etched into the glass. Ribbed bellies of bridges traverse the corridor above your head to connect the different themes exhibited upstairs. Each bridge floor is made from a different material, evoking different aspects of the earth and its elements. These platforms allow you to pause and float in the space, to absorb your surroundings before you are drawn into the walls again to walk inside a leaf or be shovelled up by a giant digger.

Ritchie's environment is both interactive and reflective. Although some of the detailing is a bit flimsy the overall effect is informative and convincing.

ADDRESS Cromwell Road, London SW7 [4K 75]
CLIENT Natural History Museum
STRUCTURAL ENGINEER Ove Arup & Partners
CONTRACT VALUE £2 million
SIZE 3000 square metres
TUBE South Kensington – Piccadilly, Circle, District Lines
BUS 14, 74, C1 to Exhibition Road
ACCESS open

Ian Ritchie Architects 1991

Clore Gallery, The Tate Gallery



Stirling Wilford Associates 1980–1985

Clore Gallery, The Tate Gallery

In 1851, 290 oil paintings and 20,000 works on paper by J M W Turner were left to the nation. The collection was fragmented due to flooding in the Tate and to war damage, and as a result much of the work was stored in the Print Room of the British Museum. The daughter of Sir Charles Clore (a dedicated friend and benefactor of the Tate Gallery who sadly died before discussions for a new gallery started) proposed that the works be housed together again, and Stirling and Wilford were appointed as architects in 1979 having recently completed the Staatsgallerie in Stuttgart. It was a triumph, not only as an example of oustanding private patronage to the arts (£1 million was also donated by the Government) but also as a chance for James Stirling, one of Britain's most astounding architects, to create a prominent public building in the capital city.

The brief was to hang 100 of the best paintings permanently, to have reserve galleries, a print room for the works on paper and sketchbooks, a conservation studio and auditorium. The site determined the L-shaped extension, built between Sidney Smith's classical Tate and a red-brick military hospital. The front façade echoes neighbouring materials – red brick set within a honey-coloured stone grid. The intention was to make the Clore 'a garden building ... a bit like an orangery', hence its low roof line and attention to landscaping in the foreground. The back of the building is simply yellow brick and obviously designed not to be seen. The façade is strikingly windowless, only two green windows and the entrance penetrate the grid and suggest that something occurs inside.

The entrance hall (in hues of 'Peach' and 'Fragrance') applauds Mannerism in the same way that the National Gallery extension does. The architect uses the staircase to articulate a tight space, making reference to the Scala Regia in the Vatican in Rome. On entering you walk to your left across the hall, then right up the stairs, following the pink

The Sackler Galleries, Royal Academy

Foster Associates 1989–1991

The Sackler Galleries, Royal Academy

Sir Norman Foster adds his name to a short but distinguished list of architects who have contributed to the evolution of the Royal Academy. Burlington House was built in 1666. The front elevation was remodelled by Colen Campbell from 1717–1720, with a garden façade by Samuel Ware added in 1815 and a gallery extension in 1867 by Sidney Smirke. A gap, almost 5 metres wide, between the garden façade and Smirke's extension is the site for Foster's contribution which provides new circulation up to the previously isolated Diploma Galleries on the third storey.

From the atmosphere of a narrow Victorian alley-way at ground level, visitors are rapidly transported by a glass-walled, hydraulic lift up to a new public space. The journey up through three floors past the newly renovated exteriors by Smirke and Ware is breathtaking (it could quite easily be 30 floors). At the top you are dazzled by bright white light through translucent glass all around, and the vast, sculpted head of a Greek god resting on the parapet of Smirke's façade creates a bizarre and dramatic sense of scale and great distance.

Stepping out of the lift into the public gallery and meeting place, you are free to wander and look at Gibson's sculptures which sit along the same parapet. At the end, across a delicate glass bridge, is a cool, open ante-room where you can sit and view the Royal Academy's most valuable possession, Michelangelo's 'Virgin and Child with Infant St. John', and catch another look back along the sculpture gallery. This series of spaces is simply defined by light and subtle changes in materials, which float structurally independent between the old buildings. Glazed edges around the floor surfaces help to make this distinction between the old and new building techniques.

The three Diploma Galleries (now the Sackler Galleries) were gutted, flat roofs demolished and two barrel-vaulted ceilings installed with roof

VENTURI SCOTT BROWN & ASSOCIATES

THE NATIONAL GALLERY SAINSBURY WING

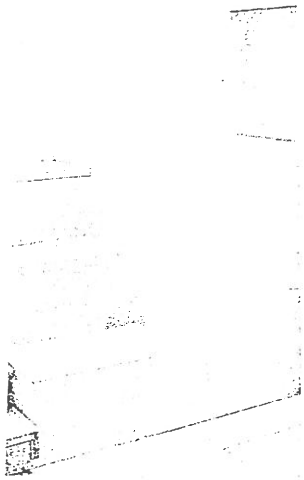
Trafalgar Square

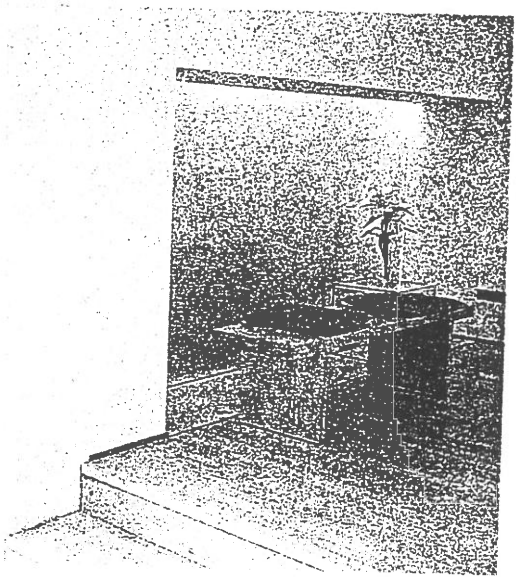
Built on the last open space on Trafalgar Square, the Sainsbury Wing houses one of the world's foremost collections of early Italian and Northern Renaissance paintings. Stylistically the wing is designed to relate to the original building (designed by William Wilkins in 1838) while maintaining its own identity as a work of contemporary architecture. It is constructed of the same Portland stone and observes the cornice height of the original. Elements from the Wilkins facade are replicated on the new building, but used in innovative and unexpected ways, alongside elements that are in contrast with the older building.

The new wing provides a more generous entry giving access to the entire National Gallery. Inside is a 350-seat lecture theatre, temporary exhibition galleries, an enlarged museum shop, a restaurant and conference rooms, as well as an interactive information centre for the public. A processional stair, located behind a glass wall that affords a view of the Wilkins building and Trafalgar Square, leads from the lobby to the third floorpermanent galleries which are laid out in a gently implied hierarchy of small, medium and large rooms lit by a combination of natural and artificial light. Some galleries contain windows that overlook other interior spaces and offer glimpses of the outside.

The new wing is separated from the Wilkins building by the Jubilee Walk, a pedestrian way connecting Trafalgar and Leicester Squares. The two buildings are joined by a bridge connection with views toward both squares. The remaining public spaces are located on the four levels below the main gallery level, two below ground level. All are related to either the upper or lower grand processional stair.

Osho Gallery, The Economist Building





Stanton Williams 1994

Osho Gallery, The Economist Building

In the heart of St James's, an area associated with shopping and dining out rather than a tranquil spot for contemplation, a new gallery has been-embedded in the the ground floor of Alison and Peter Smithson's listed Economist Building. Osho International, a publishing house dedicated to spreading the word of the mystic Osho, wanted a gallery space 'to give expression to the silence, grace and spaciousness of mediatation'. The architects responded by creating a series of flexible, light, open spaces where exhibitions can be held, books and artefacts can be displayed, and quiet converstations can be had against the background murmur of a falling water feature.

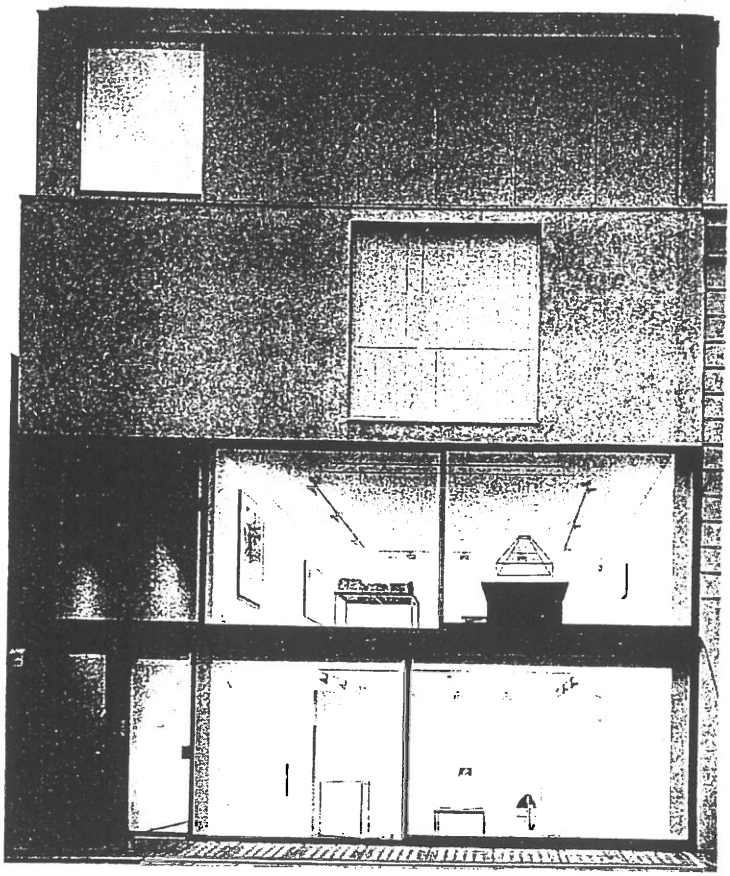
All the interior surfaces are made from light materials: walls are white-painted plaster; the rear gallery has a white Portuguese limestone floor ; Canadian maple timber is used on the floor of the front gallery and for all the joinery and furniture.

Changing floor and ceiling levels and a tight floor plan have created an ætherial crypt-like space which faces directly on to the street from within one of London's most admired modern buildings. This has been achieved by a thorough use of good materials and the maintenance of natural light while outside noise is deadened by adding secondary glazing to the elevations.

ADDRESS St James's Street, London W1 [1G 77]
CLIENT Osho International
STRUCTURAL ENGINEER YRM Anthony Hunt Associates
TUBE Piccadilly – Piccadilly Line
BUS 9, 14, 19, 22, 38 to Piccadilly (get off near the Royal Academy)
ACCESS open Monday to Saturday 10.00–18.00

Stanton Williams 1994

The Lisson Gallery



Tony Fretton Architects 1990

The Lisson Gallery

The new Lisson Gallery is like a section of the street stripped bare. Each of its four storeys strictly corresponds in height to neighbouring buildings. The façades on the ground- and first-floor galleries have been peeled away to reveal the guts of the building through floor-to-ceiling-height square glass panels which can slide back to enable large works to be moved in and out of the gallery. The second and third storeys are occupied by flats with sheer concrete façades to allow some privacy from the school playground across the street.

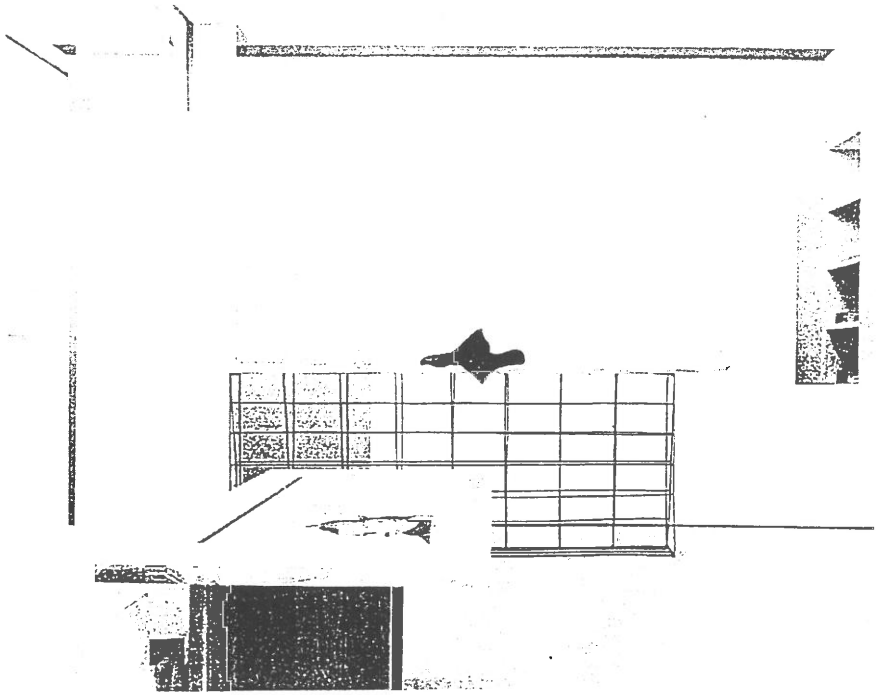
Each of the basement, ground and first floors provides a 7-metre squared space linked by an atelier-type stairway to the side. This arrangement allows smaller shows to be exhibited in a single space or for full retrospectives to flow around the entire building. The route begins in the side entrance of the old Lisson Gallery on Lisson Street which is linked to the new space by a long reception corridor. The journey becomes a succession of discoveries, exiting onto the adjacent Bell Street. This 'possession of the space by the visitor', as Fretton calls it, makes the gallery an integral part of a varied community, helping to break down the prejudices on which many art galleries thrive.

ADDRESS 52 Bell Street, London NW1 [5C 60]
CLIENT Lisson Gallery London Limited
STRUCTURAL ENGINEER Price & Myers
CONTRACT VALUE £500,000 approximately
TUBE Edgware Road – District, Circle, Hammersmith and City Lines
BUS 6, 7, 8, 15, 16, 16A, 18, 27, 36 to Edgware Road
ACCESS Monday–Friday, 10.00–18.00; Saturday 10.00–13.00

Tony Fretton Architects 1990

Winkels	adres	architect	branche
Omgeving Knightsbridge			
Equipment	21 Sloane Street	David Chipperfield	mode
Esprit	6 Sloane Street	Foster Associates	mode
Joseph Pour la Maison	16 Sloane Street	E Jiricna	mode
Kenzo	19 Sloane Street	E Jiricna	mode
Joseph Tricot	26 Sloane Street	E Jiricna	mode
Katherine Hamnett	20 Sloane Street	Nigel Coates	mode
Omgeving Brompton Road / Fulham Road			
Michelin Building	Brompton Road	Conran Roche	design
Jigsaw	31 Brompton Road	Nigel Coates	mode
Issey Miyake	270 Brompton Road	Stanton Williams	mode
Joseph pour la Ville	268 Brompton Road	E Jiricna	mode
Joseph	77 Fulham Road	E Jiricna	mode
Ook in deze omgeving:			
Jean Paul Gaultier	171Draycott Avenue		
Vivienne Westwood	World's End, 430 King's Road		
Omgeving Bondstreet			
Joan & David	Bond Street	Eva Jiricna	schoenen
Jigsaw	Bond Street	John Pawson	mode
Equipment Shop	26 Brook Street	David Chipperfield	mode
Ook omgeving Bondstreet:			
Vivienne Westwood	6 Davies Street		mode
	44 Conduit Street		mode

Issey Miyake



Stanton Williams 1990

Issey Miyake

In the school of Chipperfield, Parry and Mather, Stanton Williams explore Modernist themes with more than a hint of traditional Japanese influence. The two philosophies work well together, producing pure spaces stripped bare to provide a natural and tranquil background for the few but stunningly sculptural garments. The large areas of empty space leave room for customers to wander around in, to adjust to the clothes and then to show them off.

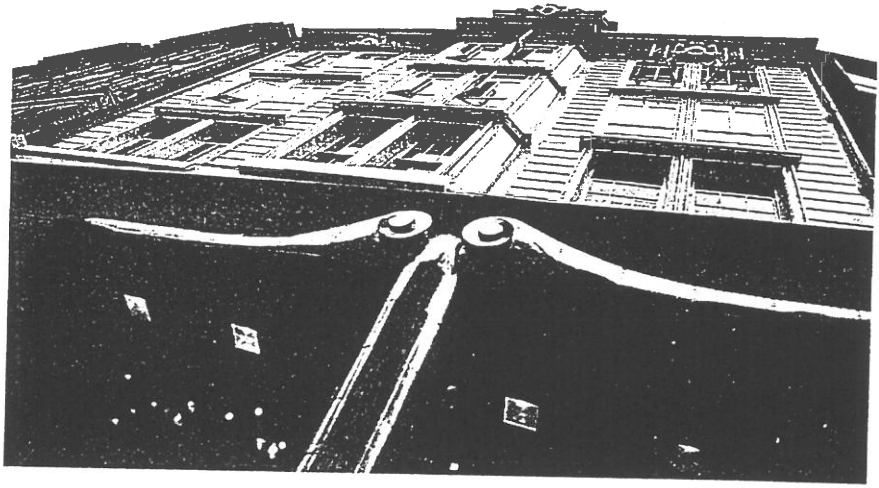
The entrance of the shop simply acts as a display case and as a transitional space between the street and the inner sanctum of the shop. All the clothes are downstairs along one wall. The rest of the basement space is a stage set; a wall, a stair, a platform, all props for flaunting the wearable art works of Issey Miyake. As in David Chipperfield's shops for Equipment (see page 68), the natural colours of the materials provide the decoration – steel balustrading, oak floors, concrete walls – leaving the clothes to speak for themselves.

Stanton Williams's other retail projects in London include: Whistles, St Christopher's Place, W1 (1991); Hayward Gallery Bookshop, South Bank Centre (1991). They have also designed several exhibitions at the Victoria & Albert Museum, The Royal Academy of Arts and the Design Museum.

ADDRESS 270 Brompton Road, London SW3 [4C 76]
CLIENT Issey Miyake
CONTRACT VALUE £600,000 (for the design of three shops of similar scale and office/apartment)
TUBE South Kensington – Piccadilly, Circle, District Lines
BUS 14, 45A, 49, 249, 349 to Fulham Road and Sydney Street
ACCESS open

Stanton Williams 1990

Jigsaw



Branson Coates Architecture Limited 1991

Jigsaw

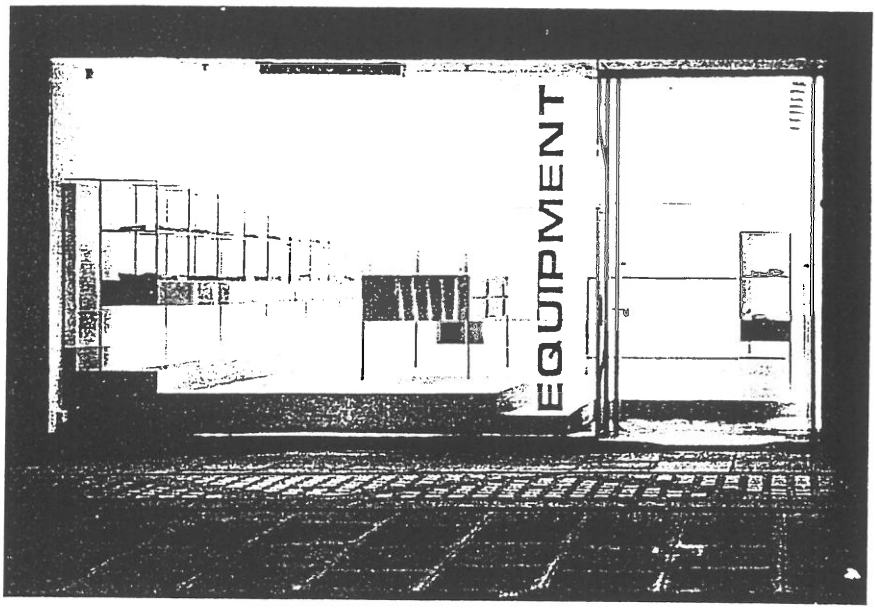
This is the grand salon of a chain of fashion shops which developed a new image for itself in association with Branson Coates Architecture from about 1988. Other branches are in Kensington High Street and St Christopher's Place. The Knightsbridge outlet is an appropriate tribute to an area well known as a superior shopping location.

Customers are lured in from the street by a huge organic, bronze column in front of a double-height glass façade. The ground floor, paved in stone, acts as an extension of the pavement. Green and grey make a mossy cove inside, then a sweeping terrazzo staircase carries you up into a glowing, carpeted main room. In the architect's own inimitably theatrical way, everything from the chromed mannequins and dripping blue-glass chandelier to the tongue chairs in brick-red velvet (for customers to lounge on) is sumptuous, reflecting the rich colours of the clothes themselves and the sheer joy of trying something on and showing it off. All these details were designed by the architects or Nigel Coates exclusively, with the mural designed and painted by Stewart Helm.

ADDRESS 31 Brompton Road, London SW3 [4C 76]
CLIENT Jigsaw Limited
STRUCTURAL ENGINEER Dewhurst McFarlane & Partners
TUBE Knightsbridge – Piccadilly Line
BUS 9, 10, 14, 19, 22, 52, 74, 137, 137A, C1 to Knightsbridge
ACCESS open

Branson Coates Architecture Limited 1991

Equipment



David Chipperfield Architects 1992

Equipment

The product for this store is an elegantly folded silk shirt in a range of bold and beautiful colours. The whole shop acts as a display case for these shirts rather than individual shelving units in an anonymous space. The building materials have been selected for their neutrality and rawness so that they do not conflict with the strong product in any way, but help to enhance it, particularly in the way that light plays on the natural colours of the walls, floor and podium.

Chipperfield's approach to design is through composition rather than specific elements. He defines spaces with timber (an elm floor here), stone, concrete and stainless steel (in the shelves), letting these surfaces sculpt the quality of the interior.

There is another Equipment shop by Chipperfield on Brook Street, W1.

ADDRESS Sloane Street, London SW1 [3D 76]
CLIENT Equipment
TUBE Knightsbridge – Piccadilly Line
BUS 19, 22, 137, 137A, C1 to Sloane Street
ACCESS open

David Chipperfield Architects 1992

Restaurants	adres	architect
designrestaurants		
St. James'		
Quaglino's	16 Bury Street SW1	Terence Conran
Covent garden		
Now and Zen	4a Upper St Martin's Lane	Rick Mather Architects
Marylebone		
Doyle's Restaurant	bij Clifton Ford Hotel	Brady + Mallalieu Architects
Finchley Road		
Wakaba Restaurant		John Pawson and Claudio Silvestrin
Oxford Street		
Zoe Restaurant	St. Christopher'sPlace	Whitmore-Thomas
Mezzo	100 Wardour Street W1	Conran
Soho		
The Avenue	St James Street, Piccadilly	Rick Mather
Wagamama (Japans)	Streatham Street W1	David Chipperfield
Knightsbridge		
Harvey Nichols fifth fl	Knightsbridge	Wickham & Associates
Bibendum	81 Fulham Road SW3 In Michelin gebouw	Conran
Notting Hill Gate		
City Rhodes	New Street Square	JSP Architects
Chalk Farm		
Belgo Restaurant		Anand Zenz
River Café	Thames Wharf Studios, Rainville Road W6	
Butler's Wharf		
Blue Print Café	Design Museum SE1	
Overige interessante café's:		
Sticky Fingers	1a Phillimore Gardens W8	restaurant van Rolling Stone Bill Wyman

RICK MATHER ARCHITECTS

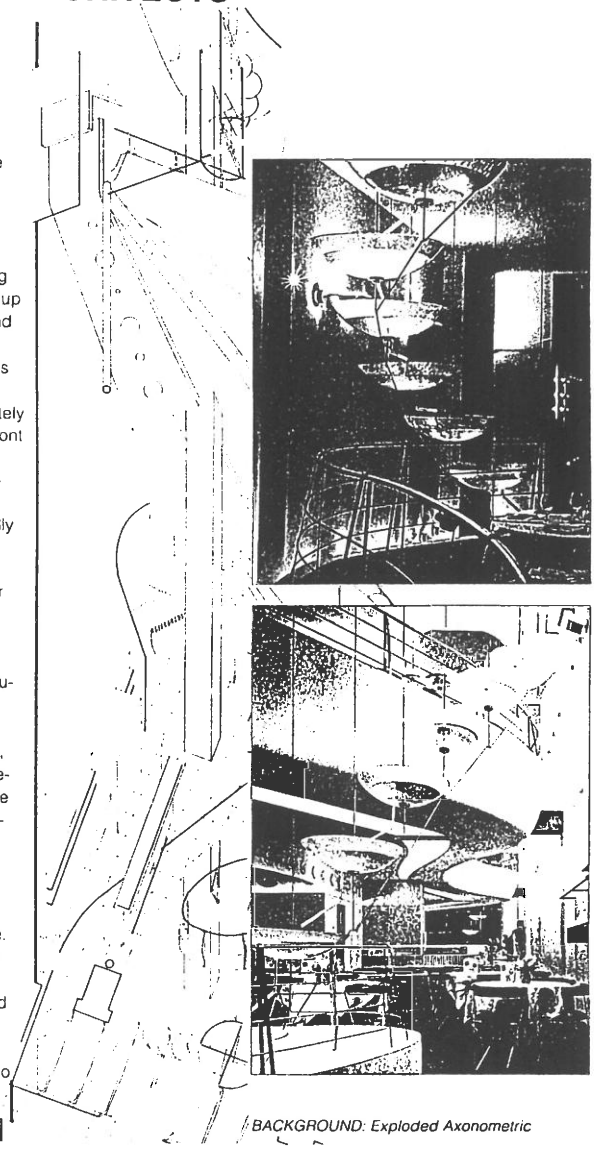
NOW AND ZEN
Covent Garden

Zen restaurants are extrovert. The opposite of the stiff, formal, self-conscious type of restaurant too often associated with the high level of service and food that Zens achieve. So instead of closing in on itself and cutting out the outside world the design opens up to enjoy real light, daylight, sunshine and street life – particularly good in this location, being in the middle of London's theatre and entertainment district.

The facade of the new Zen is completely formed of glass (and the pavement in front as well) so all the air, light and view possible is brought right into the restaurant. The most advanced techniques of glazing are used to achieve the unusually large paned glass floor outside and a 5.5 x 7 metre structural glass front that includes the first all-glass revolving door ever built (there is no steel frame).

Inside the three floors appear as one with big elements stretching throughout the whole restaurant – the most spectacular being the glass dragon waterfall that drops through all three floors to the basement. Similarly the yellow back wall, the red and purple columns and the blue-green staircase extend through the whole design to tie it all together. The strategically placed mirrors double and extend the interior space and with the curving balcony, roof-light looking up seventeen storeys and holes in the floor give dramatic and unexpected views everywhere.

This project started as an unpromising concrete shell with an almost unusable basement. Reinforced concrete walls and floors were removed and a whole new steel structure inserted to create the completely new curving mezzanine and to open up and free the basement and ground floor into one big space.



BACKGROUND: Exploded Axonometric

TERENCE CONRAN WITH KEITH HOBBS & LINZI COPPICK

QUAGLINO'S

St James'

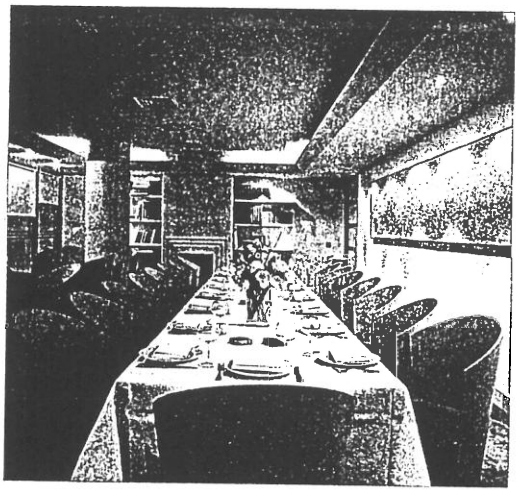
Quaglino's was a very dazzling restaurant in the 1930s and had a particular place in the social history of those times. In its second incarnation it is intended to be the most spectacular restaurant of the 1990s, bringing glamour to the rather different social life of modern London. The new restaurant is designed to be a huge, bustling place of entertainment in the spirit of the last decade of this millennium.

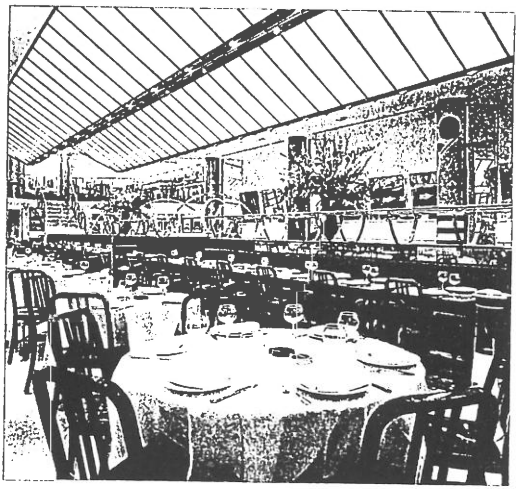
Many of the qualities that made the original Quaglino's a great restaurant are being carefully revived. The new Quaglino's occupies the space that was once the ballroom of its famous predecessor. When Terence Conran, Joel Kissin and Keith Hobbs first saw it towards the end of 1990, it was an enormous hole in the ground with eight huge columns marching down its length.

As their plans gradually formed they decided to install a mezzanine level, thus increasing the floor space to 15,000 square feet. In this way they could create a bar and a private dining room which overlooked the main body of the restaurant.

The extra level also gave them the opportunity to introduce curvaceousness to what was a fairly dull space. Two glamorous staircases create a dramatic sense of occasion.

The other major decision was to install an illuminated skylight running the complete length of the restaurant with lighting that emulates the sky during the daylight hours and into the night. The heating, cooling, ventilating, refrigerating and extracting requirements of a modern restaurant of this scale are enormous and the network of pipes, conduits and ducts have been smoothed out of sight.





BRADY + MALLALIEU ARCHITECTS

DOYLE'S RESTAURANT

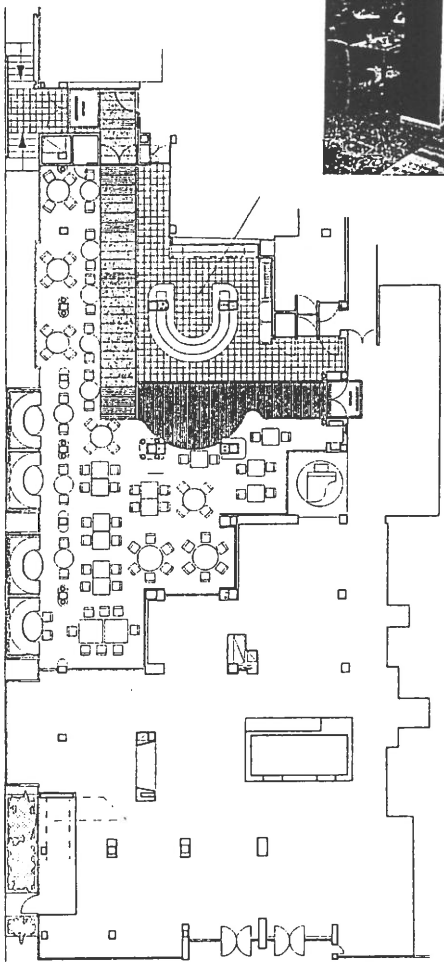
Marylebone

Doyle's new restaurant and bar is part of the Clifton Ford Hotel refurbishment of their existing restaurant and it also forms a new street entrance to increase trade with non-residents.

The hotel is a low-key sixties modern building, clad in aluminium and granite curtain walling. The new work includes a new ground-floor elevation to the south with extensions over an area of pavement lights between the building and pavement edge. The existing restaurant was completely stripped back to the concrete shell and now seats 112 diners. The space was a deep plan with low ceilings. The architects tried to ensure the maximum penetration of daylight by fully glazing the south wall with the roofs of the extended bays acting both as shading devices and reflectors which work with sloping internal ceiling planes to direct light horizontally. Concealed up-lighting in the lower ceilings continues the light source at night.

The hotel and restaurant are four star rated which demands a certain opulence. Hardwoods and granite were used to give richness to the internal fittings. The differing areas of the floor plan are defined by ceramic tile, hardwood strip and carpet while other definitions are used for the sculpted ceiling. Walls and ceilings painted in blues and yellows add further richness in selected areas as do carefully positioned mirrors.

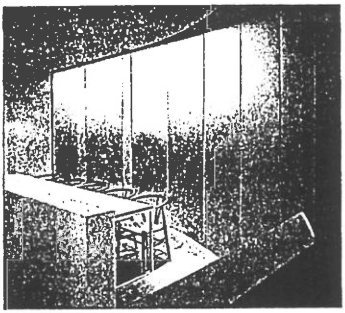
Externally the new street elevation is of stainless steel, glass and granite. Projecting bays are treated as simple 'Miesian' boxes with exposed stainless steel frames. The main emphasis is saved for the new terracotta entrance porch and steps which introduce the lone splash of colour.

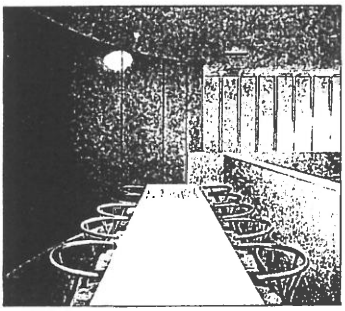


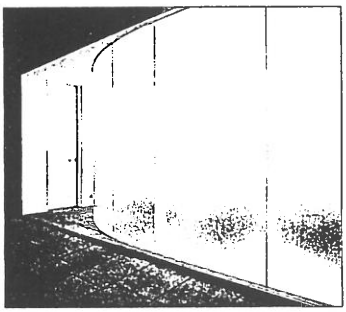
Ground Floor Plan

JOHN PAWSON
AND CLAUDIO SILVESTRIN

WAKABA RESTAURANT
Finchley Road







ABOVE: Floor Plan

The facade is a single wall of translucent, acid-etched glass curving delicately into a concealed entrance. It forms an ambiguous barrier between the restaurant and the garish road outside; both a sign in itself and protecting the tranquillity of the interior. Inside there is little to detract from the business of eating and conversation except for the glass wall.

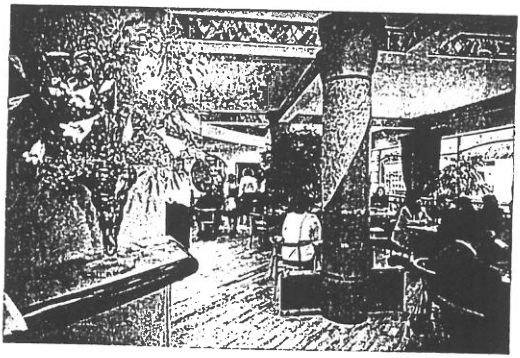
After dark it absorbs the brash neon signs outside, the changing traffic lights and passing cars so that the whole glass is suffused with colour.

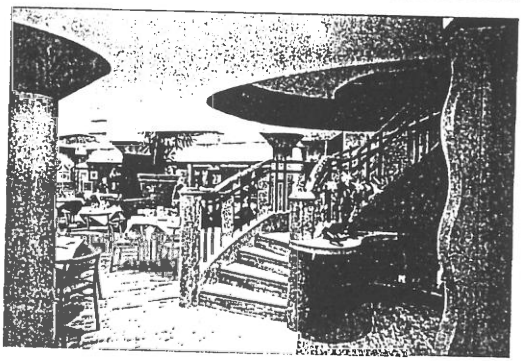
Coats are concealed behind full height screens, lit from behind at night, and sushi utensils are kept behind lacquered doors.

Order is imposed on the seating layout by defining distinct areas with low screen walls. Tables, chairs and floor use the same white oiled beechwood.

WHITMORE-THOMAS

ZOE RESTAURANT
Oxford Street





Whitmore-Thomas design consultancy were commissioned by Antony Worrall Thompson, chef and creator of Menage à Trois, dell' Ugo and 190, to help him to recreate his newest restaurant, Zoe, on the corner of St Christopher's Place.

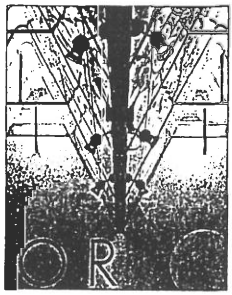
For the first time in their twenty-four years of practice Whitmore-Thomas were asked to re-work one of their existing interiors, the old Zen Cargo, to a completely new brief. It had to suit the new direction, menu content and inspiration of AWT, remaining contemporary, fun and fashionable but becoming more welcoming, relaxed and friendly; and certainly more colourful.

With AWT, Whitmore-Thomas evolved an entirely new palette of Mediterranean-inspired strident ochres and sages with which to re-work their existing structure and interior. The transformation is staggering. Steve Thomas says, 'When I was a painting student at Chelsea School of Art I remember a particular painting that I completed in my last year. This interior is the three-dimensional equivalent. It has an unreal quality to it, as if in a dream, or perhaps nightmare!' This colour vibrancy contrasts and works alongside natural materials such as oak and pine, both colour-stained and natural, hessian and rope, copper, nickel and terracotta.

The logo for Zoe (Greek for 'life') is a copper abstracted sunflower, created, along with the typestyle, by Chris Angell of Whitmore-Thomas It is used extensively for external signs, on menus and on staff uniforms. The logo becomes even more abstracted in the numerous 'colour-wheel' framed artworks on the ground-floor café walls. The bar, café and restaurant (downstairs) opened in December 1992.

WICKHAM & ASSOCIATES

HARVEY NICHOLS – FIFTH FLOOR
Knightsbridge

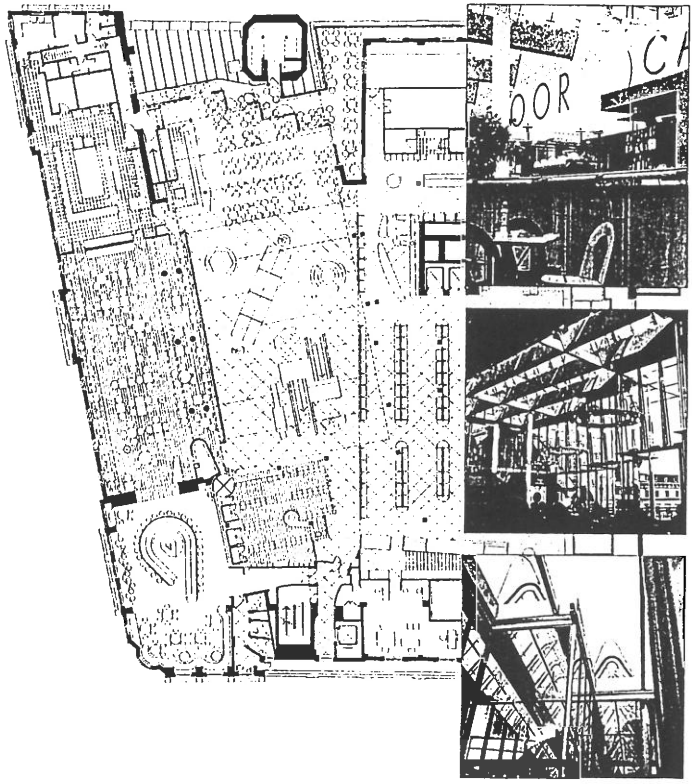


Opening up the fifth floor of Harvey Nichols (approximately 30,000 square feet) to provide a food hall, wine shop, café, bar, restaurant, kitchens and office areas so that the interior space could be seen to provide uninterrupted access between the various parts of the operation, meant that the main task was to strip this space right back to the bare structure. The original building was developed over a period in excess of a hundred years and at least four distinct periods of development were found.

At the top where the old main northern light-well had been, a large existing roof structure of triangular steel lattice beams forming a rectangular space was found. These were retained and restructured to provide a large roof light over a space central to the fifth-floor operation. The northern section of the building, above which are situated four large cupolas, was completely gutted and a new roof constructed with extensive structural intervention in steel to re-support the cupolas, thus forming a free open space. To the east of the old main light-well a new structure was built extending the central space to form the café.

The brief identified the users of this new operation as being a combination of new and regular clientele. The task was to bring the street up to the fifth floor by adding additional high-speed lifts. The main rectangular space under the main roof light is seen notionally as a market square, providing a central space around which the various facilities are grouped.

Our solution for this project would suggest that most buildings are to a great extent flexible and adaptable, receptive to new uses and changes in our perception of social process.

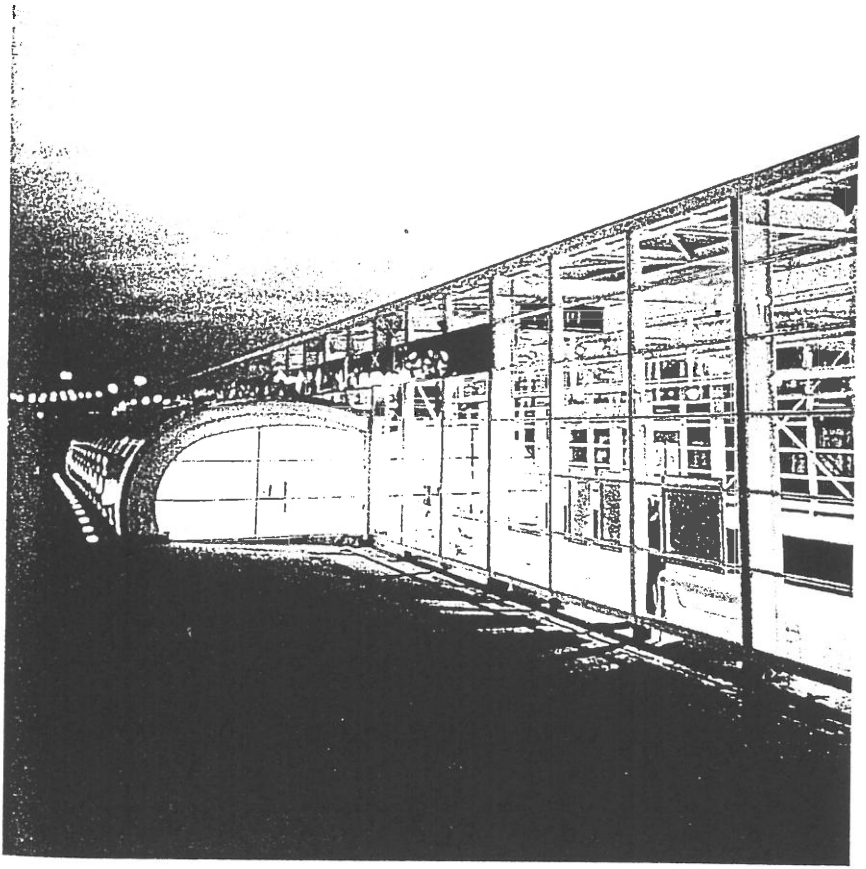


Floor Plan

SUNDAY 27 APRIL

	Early morning jog in Hyde Park or just a stroll around Kensington and Holland Park.	
D 10.30	**Coach leaves from hotel. (Don't forget to take your luggage!)**	
A 11.15 - D 11.30	. Tottenham Hale Station (1991)	Allsop, Lyall & Störmer
A 13.00 - D 13.15	. Schlumberger Research Ltd (1985 / 1992)	Michael Hopkins and Partners
A 13.30 - D 14.30	**Pub lunch in Cambridge.**	
A 14.00 - D 18.00	Guided tour around Cambridge with Mr. Viren Sahai, Chairman of the Society of Architects in Cambridge, to:	
	. Fitzwilliam College Chapel (1991)	MacCormac Jamieson Prichard
	. St. Johns College Library (1993)	Edward Cullinan Architects
	. Rare Books Repository, Newham College (1982)	Van Heyningen Haward Architects
	. Post-graduate Study Centre, Darwin College (1994)	Jeremy Dixon/Edward Jones
A 16.15- D 16.45	**Time for a cup of tea**	
	. Faculty of History Library (1968)	James Stirling and Partner
	. Harvey Court Residential Building (1961)	Sir Leslie Martin and Colin St. John Wilson
	. Law Faculty, Cambridge University (1995)	Sir Norman Foster and Partners
	. Lecture Hall, Emmanuel College (1996)	Michael Hopkins and Partners
	. The Judge Institute, Cambridge University (1996)	John Outram Associates
D 18.00 - A 19.00	**By coach from Cambridge to Stansted.**	
A 19.15	**Check in.**	
A 19.30 - D 20.15	. Stansted Airport (1991)	Sir Norman Foster and Partners
D 20.45 - A 22.45	**Flight UK 774: Stansted - Schiphol.**	

Tottenham Hale Station



Alsop Lyall & Störmer 1991

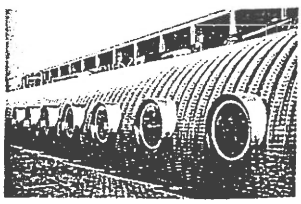
Tottenham Hale Station

Built at a time when the national railway system is threatened by privatization, this represents all that is opposed to such a move by showing how the public and private sectors can co-ordinate and work successfully together in public design (British Rail, London Underground, London Buses and the British Airport Authority all meet and co-operate at this interchange). Tottenham Hale celebrates railway architecture without nostalgia by anticipating a relaxed and more glamorous way to travel. It forms part of the journey from the high-tech Stansted Airport into central London, creating a stylish impression for first-time visitors.

As in many of Alsop's buildings, the structure and imaginative use of materials are boldly evocative of the station's function. The main external feature, a gleaming curved aluminium skin with portholes, looks like the side of an aeroplane or an emerging submarine and contains a buffet, waiting room and lavatories. Above this, integrated into the white steel and glass framework that spans the tracks, is a 53-metre painting by Bruce McLean on enamelled steel panels – a rare example of art which is an essential part of the architecture and not a decorative afterthought.

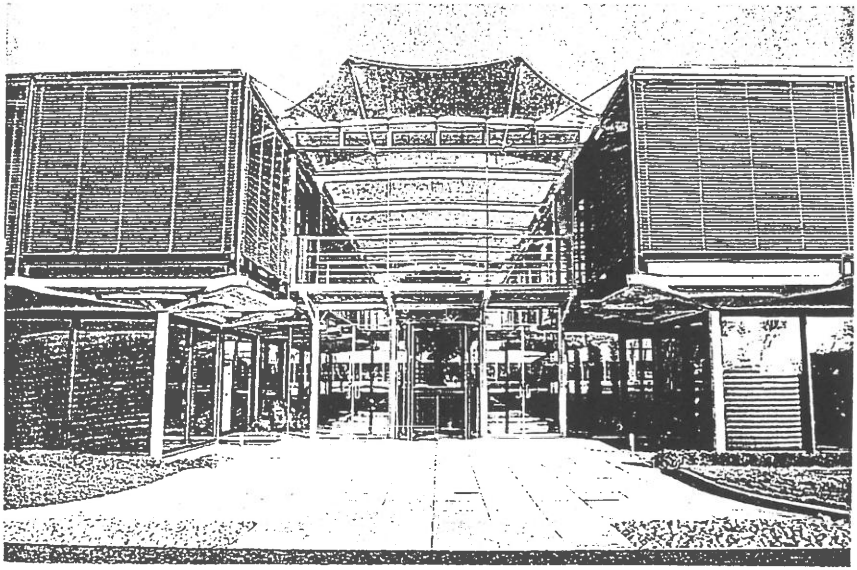
On a suprisingly low budget, an important and unusual architectural gesture has been made, contributing not only to a new generation of building in London, but also to the identity of the local community.

ADDRESS Ferry Lane, London N17 [4G 31]
CLIENT British Rail Network South East
ENGINEER Felix J Samuely & Partners
CONTRACT VALUE £2.3 million
TUBE Tottenham Hale – Victoria Line
BR from Liverpool Street or Stansted
ACCESS open



Alsop Lyall & Störmer 1991

Schlumberger Research Ltd



Michael Hopkins & Partners 1985 and 1992

Schlumberger Research Ltd

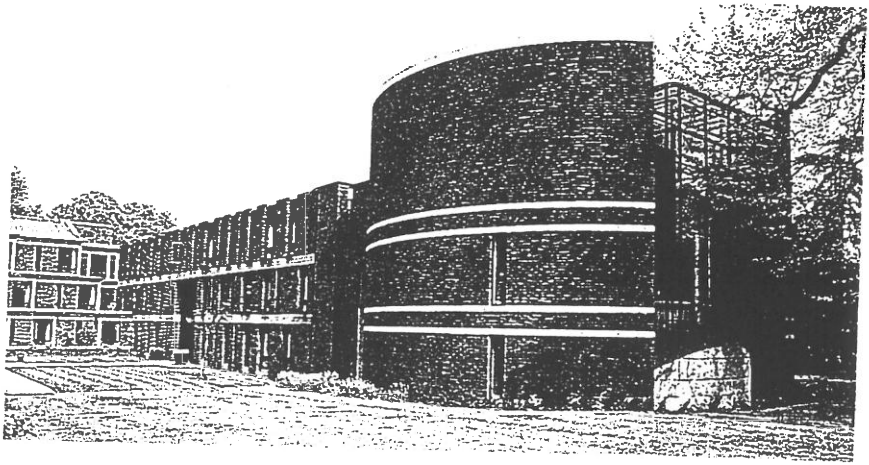
Cambridge

Schlumberger Cambridge Research is a multi-national group providing technical services to oil-exploration companies. Its UK arm investigates drilling and fluid mechanics, rock and well-bore physics and the computer modelling of drilling information. The company needed a new research facility and a test station to house a simulated drilling rig, requiring a clear height inside of 10 metres. Schlumberger is a patron of good design – its other main research facility in Connecticut was designed by Philip Johnson, and their Paris headquarters by Renzo Piano. Hopkins was chosen to add to this prestigious list because his proposal was courageous and experimental, like the client's work.

Sited on high ground just outside Cambridge on land belonging to the University, the project has been built in two phases. The tented structure was built first and is the focus as a prototype construction. The main entrance building on the south side was added seven years later, borrowing from earlier Hopkins projects, particularly the Solid State Logic building in Oxfordshire (see page 352). The phase 1 brief stressed the importance of maximum contact between departments: research and computing labs, manufacturing services and offices share a similar quality and flexibility of environment. The solution was to put the test station at the heart of the building and surround it with offices and recreational areas for the other departments so that they could all have the same clear view of the focus of the company's interest. The resulting design puts offices (looking out through full-height sliding windows) and laboratories (looking in through a glazed wall) in two single-storey strips on the east and west sides of the north-facing test station (formed from two 24 x 18-metre bays) and the south-facing winter garden, which contains a full-height restaurant and library (formed from a third 24 x 18-metre bay).

Michael Hopkins & Partners 1985 and 1992

Fitzwilliam College Chapel



MacCormac Jamieson Prichard 1991

Fitzwilliam College Chapel

Cambridge

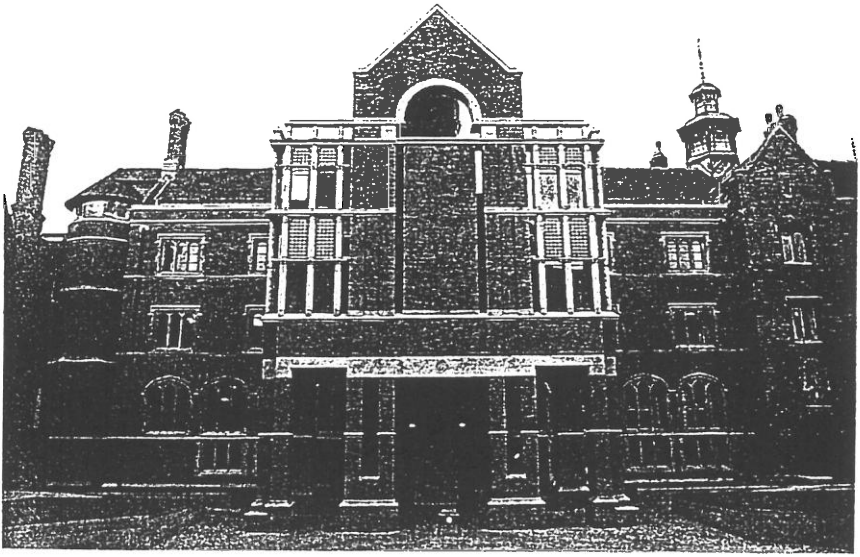
The chapel punctuates the end of a wall of student housing designed by Denys Lasdun in the 1960s. A timber core rises out of a brick skin. Entering through the heavy but very smooth timber door at ground level, you are led around the edge of the building by a gently curving stairway up into the main chapel. There is nothing overtly religious in the way that the elements of the chapel have been detailed: instead of stained glass a large east-facing clear window behind the altar pushes outwards through the brick envelope. The glass is divided by steel glazing bars and looks on to a grand old tree. There are no tapestry prayer cushions, no ostentatious flower arrangements, no put-the-fear-of-God-into-you collages.

The purity of the atmosphere is enhanced by the softness of the light wood interior and the way that natural light falls through the glass slots on each side of the altar, hitting the shallow domed ceiling over the organ, and from above through a timber clerestory, throwing curves of light down the side walls.

STRUCTURAL ENGINEER Ove Arup & Partners
CLIENT Fitzwilliam College, Cambridge
SIZE 350 square metres
CONTRACT VALUE £500,000
GETTING THERE on the Huntingdon Road, A1307 north out of Cambridge city centre
ACCESS announce your presence at the college before you wander around

MacCormac Jamieson Prichard 1991

St John's College Library



Edward Cullinan Architects 1993

St John's College Library
Cambridge

The front entrance to the library is located in Chapel Court, one of three courts that make up the college, standing opposite Gilbert Scott's neo-Gothic chapel and next to Edward Maufe's student residences (called sets) which were built in in the 1930s. The library itself penetrates the Penrose building (1885) on the south-west corner of the court. The original building had been adapted so many times that its original internal arrangement was no longer coherent. Cullinan chose to convert the building yet again but this time by adding a new axis to the original plan, thus providing more accommodation and creating a new entrance.

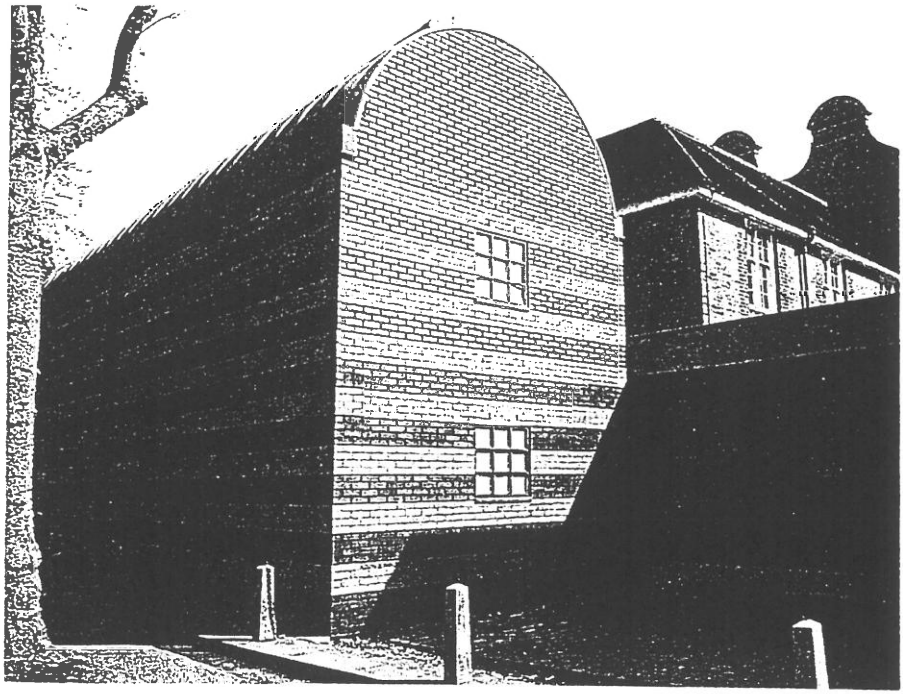
The new wing pentrates right through the Penrose building and out the other side into the Master's garden. This axis is an elongated version of the formal entrance to the old building that already existed a few metres to the right of the new library, on the same west side of the court, even down to the lantern and apsidal west-facing end. The exterior detailing is bland and crude, drawing in a modified form of window tracery from the neo-Gothic chapel and the pitch of the Penrose building roof – the aping and collaging of already mediocre styles is plainly bad-form.

Internally the new addition is more successful. A climate-control system was developed by Max Fordham Associates. When it is cold, warm air is drawn by convection from workspaces and bookstacks into a central duct at the intersection between new and old wings marked by a lift shaft surrounded by a spiral staircase, then drawn up to the lantern at the top. The air is then pushed back down by a punka fan inside the base of the spire and escapes through window frames and slots in the walls. When it is hot, a flap rises automatically inside the spire and warm air is expelled through the top.

The double-height space of the old lecture rooms has been maintained,

Edward Cullinan Architects 1993

Rare Books Repository, Newnham College



Joanna van Heyningen and Birkin Haward Architects 1982

Rare Books Repository, Newnham College

Cambridge

This stocky brick and lead-lidded treasure-chest houses the rare book collection from Newnham College Library in a suitably climate-controlled and secure environment. The architects wanted to adopt some of the qualities of Basil Champneys' original library building (1896). This was achieved by tracing the dimensions of its central nave on to the section of the repository and by adopting the barrel-vaulted ceiling and the 19th-century notion of a mezzanine level.

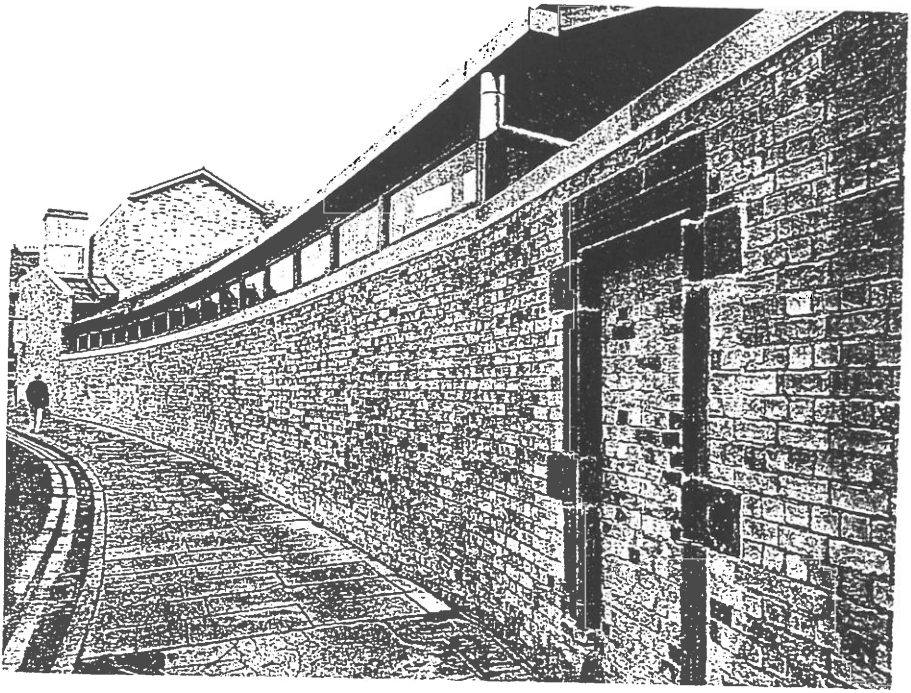
The building's monolithic quality was determined by the strict brief that it had to be secure against fire and theft, and a stable temperature had to be maintained. Natural convection currents on wall surfaces are encouraged by underfloor heating and extractor fans in the rooflight, providing the right conditions for conservation of the book bindings (the books stand 150 mm away from the wall to allow air movement). A rooflight running the length of the building provides indirect natural light but levels have to be low so cheap additional lighting has been added. A very tight budget has determined the choice of steel furniture and mezzanine which have all been made up from standard steel units and painted grey.

With its solitary reading table on the ground floor, the interior oozes the intimacy of a secret garret, the stuff of which I am sure many prospective Cambridge students dream.

STRUCTURAL ENGINEER Fogg Associates
CLIENT Peter Insk, bursar, Newnham College
SIZE 94 square metres
GETTING THERE Sidgewick Avenue, Cambridge
ACCESS very limited

Joanna van Heyningen and Birkin Haward Architects 1982

Post-graduate Study Centre, Darwin College



Jeremy Dixon . Edward Jones 1994

Post-graduate Study Centre, Darwin College

Cambridge

From Silver Street the study centre is no more than a 45-metre-long lime-mortar wall, gently curved to follow the line of the pavement (soft lime mortar is used to avoid movement joints). From the south-east-facing River Cam side, a simple fenestrated timber deck leans out over a brick base, like a houseboat with cantilevered supports as oars. As the wall suggests, and as is emphasised by the shallow clerestory window running its full length, the plan is a long, thin corridor continuing the chain of college buildings that line the street.

The study centre is more than just a library in that it accommodates books and computers, a seminar room and a flat. The architects have provided different kinds of working environments to respond to the variety of facilities and study moods of the students. Entrance is via a double-height reading room with a large picture-window view on to the Cam. The plan is then split into three lengthways along the building. On the north-west side, a book-lined arterial corridor at ground-floor level with three staircases leads up to a long, south-east-facing built-in reading bench from which you can gaze at the passing river traffic. The central strip has now been cut into four sections by the book-lined staircases, so on the ground floor they form enclosed computer rooms and U-shaped reading platforms upstairs. Seating (chrome mesh and black leather) is by Eames. The roof is lifted on both sides by strips of windows flooding the space with natural light. External cantilevered balconies provide yet another atmosphere in which to study.

The entire building is dominated by the unseasoned timber construction. The interior has been conceived as one piece of furniture: structure (post-and-beam frame and rafters), cladding, windows, floors, bookcases

Jeremy Dixon . Edward Jones 1994

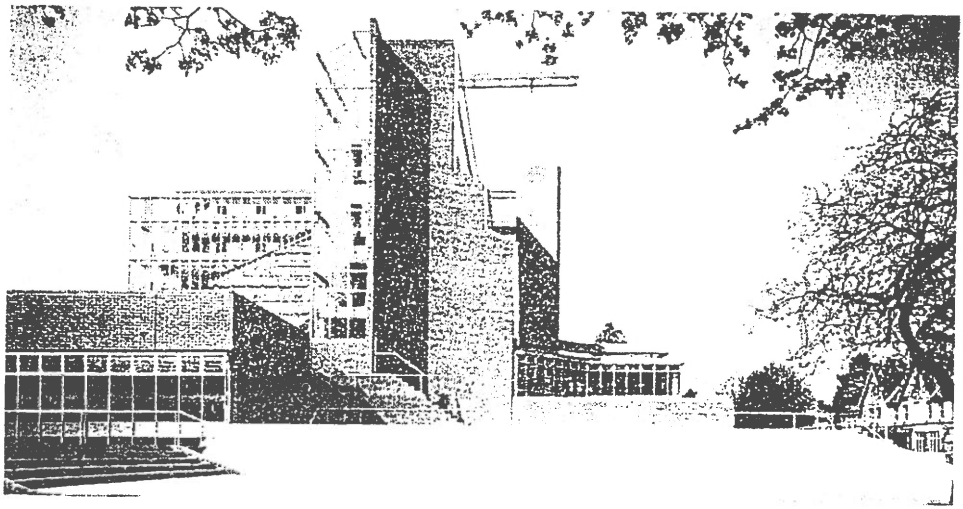
Cambridge

FACULTY OF HISTORY LIBRARY, West Road, Cambridge. *James Stirling and Partner.* 1968.

Award: RIBA Award 1970.

≠ Cambridge ☎ 0223 61441 (closed weekends)

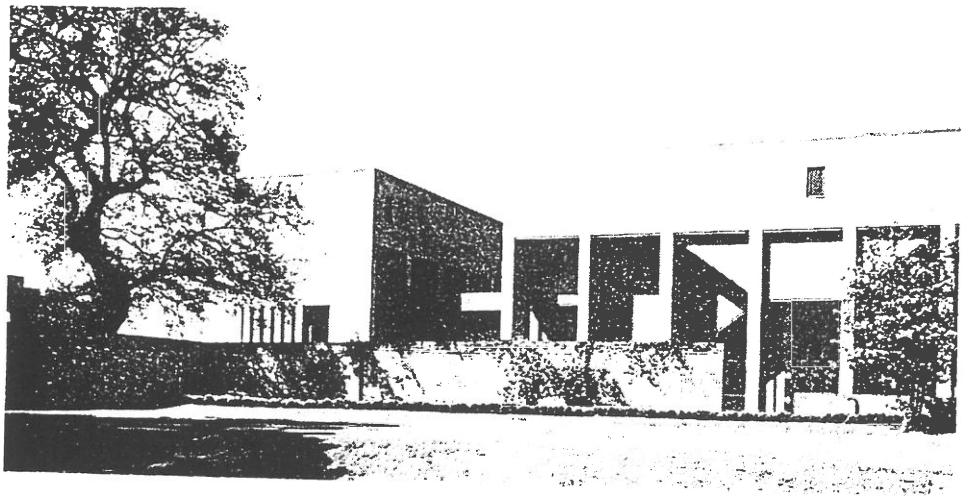
Representing one of the most exciting periods of Stirling's work, the history library is Cambridge's best known modern building. Two wings contain administrative and teaching accommodation. The glazed library and reading room fan out from between the angled wings. Technical problems have taken a long time to resolve and inevitably detract from its wide acceptability. But the building still has an undeniable sparkle and presence.



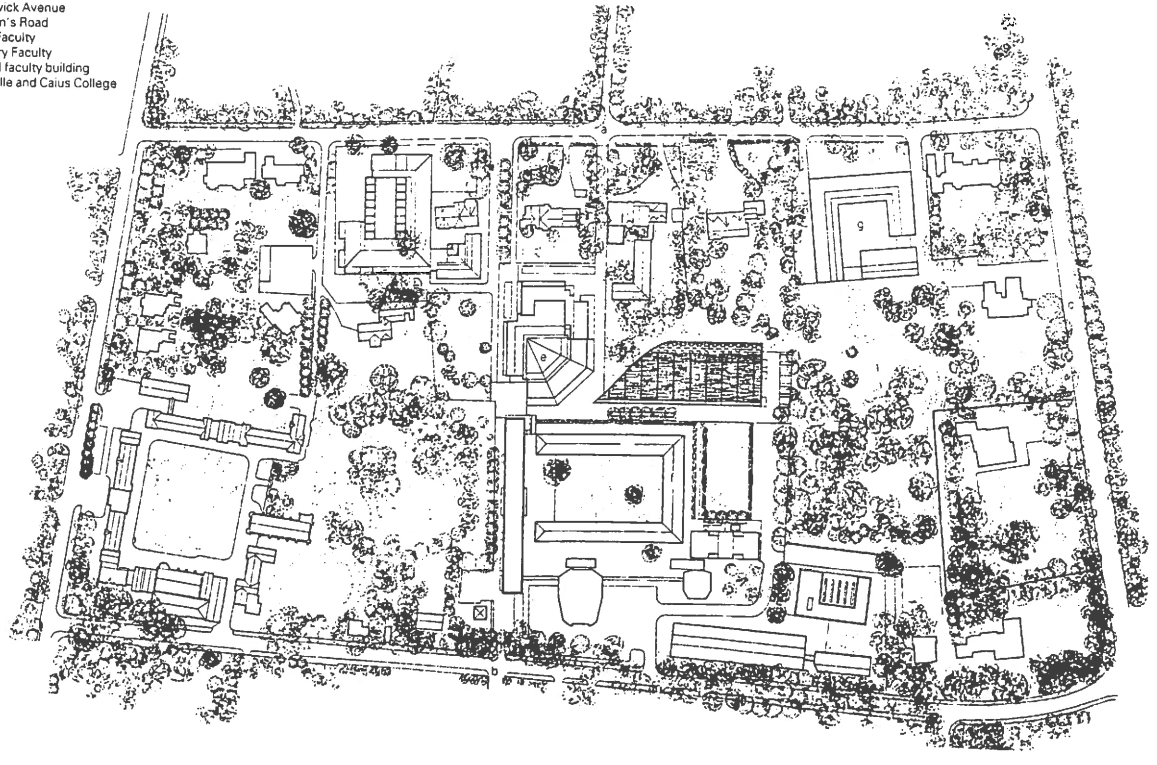
Cambridge

HARVEY COURT RESIDENTIAL BUILDING, Gonville and Caius College, West Road, Cambridge. *Sir Leslie Martin and Colin St John Wilson.* 1961.
≠ Cambridge

The stepped section of this courtyard scheme allows generous balconies for each of the study bedrooms. On three sides the rooms face inwards overlooking the roof of the submerged breakfast room, while on the fourth side they look onto a mature garden. The colonnade of the West Road evelation is formed by the stepped section and the lower floors giving limited views to the access ways around the perimeter. Brick is used throughout and the building is a successful example of the use of a single material.



a West Road
b Sidgwick Avenue
c Queen's Road
d Law Faculty
e History Faculty
f raised faculty building
g Gonville and Caius College



site plan

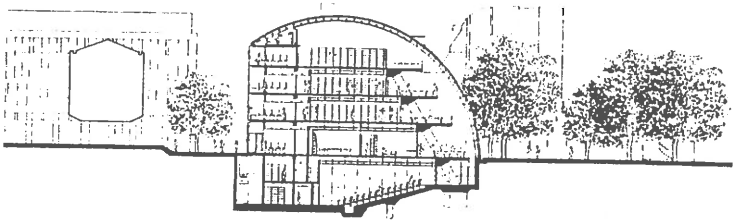
LEGAL PRECEDENT

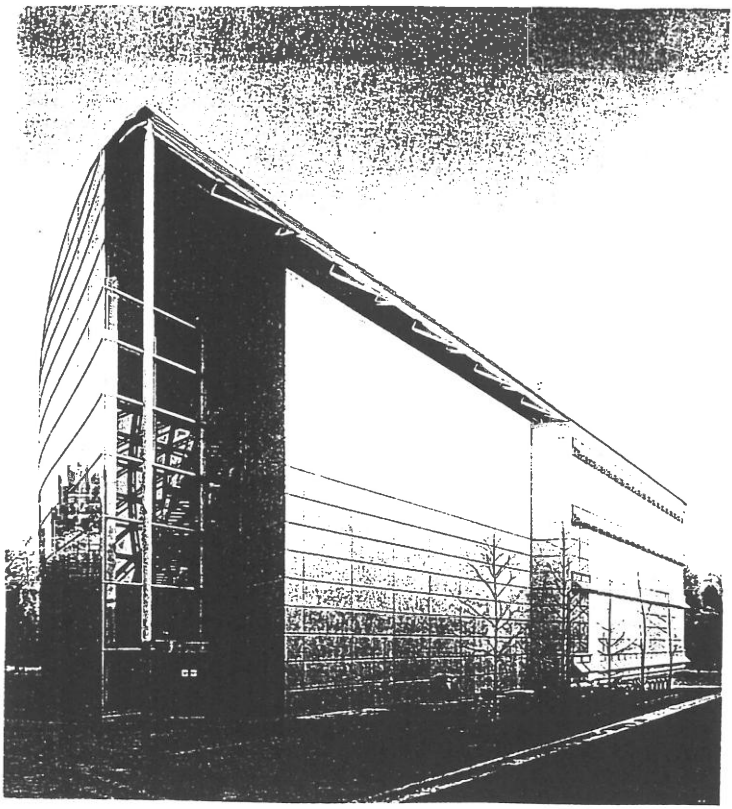
Post-war Cambridge has built in haste, and repented at leisure. There is perhaps no better setting in which to examine the follies, extravagances and occasional triumphs of contemporary British architecture. Cambridge can make – or unmake – an architect's reputation. But it is the city and the university that have had to put up with the long term consequences of a prolonged and enthusiastic flirtation with architectural superstars. Considered *en masse*, the results can be disheartening. That, at any rate, was the conclusion reached by Philip Booth and Nicholas Taylor in their *Guide to Cambridge New Architecture* (1972). Even today, after the healing interval of 20 years, it is hard to disagree with their conclusion that the huge influx of post-war talent has led 'not to an enriched environment but to confusion and overstatement'.

There are few better places in Cambridge to study this confusion and overstatement than the Sidgwick Avenue site. Long ago, Nikolaus Pevsner argued that Cambridge's future lay beyond the Cam 'in a campus more beautiful than any in America, a precinct much larger than the precincts of the individual colleges, yet a precinct all the same'. Sidgwick Avenue was to become Cambridge's intellectual theme park, with the individual arts faculties mimicking in their layout the format of the colleges – and by implication vying with them as a focus of learning.

Hugh Casson's masterplan and finished buildings, though much derided at the time for their picturesque obsessions with cobbles and bollards, and finicky fenestration, were true to the spirit of such a collegiate campus. And although the gale-swept 'cloister' running beneath the raised faculty blocks is no place to linger on one of Cambridge's more Siberian winter afternoons, this is an honourable and largely successful piece of townscape in the Cambridge idiom of turf and paving, open and enclosed space. One can have too much of a good thing however, and it is perhaps fortunate that the Casson Conder scheme was not allowed to extend all the way to West Road. The rivalries and trade-offs between dons and departments on one hand, and colleges who own most of the land, on the other, have always put paid to comprehensive thinking on this scale. In consequence, many contemporary buildings at Cambridge stand shoulder to shoulder and ill at ease, like VIPs at a cocktail party who have not been introduced to one another. At Sidgwick Avenue, James Stirling's angry red History Faculty was clearly not on speaking terms with anybody; and so it has fallen to Norman Foster on the adjoining site to effect a few introductions.

Given Cambridge's long-term fixation with glamorous architects, it was obvious that sooner or later Foster would land a commission here. The question to be asked is, has yet another intervention from a brilliantly talented outsider merely added to the confusion and overstatement which is already rife at Cambridge, or has there been a genuine gain?





Law Faculty, Cambridge University

The first thing that needs to be said of the new Law Faculty is that quite apart from its merits as a building – which are considerable – it is a tactful insertion into a very difficult site. To build opposite the History Faculty must be the architect's equivalent of donning the shirt of Nessus. In form, materials and orientation, Stirling's glowering masterpiece is a calculated snub to the Casson Conder block next to it and a threat to anything which might be placed in the immediate vicinity. One of Foster's achievements has been to establish, or in some cases, reinstate, a coherent north-south axis through the Sidgwick site; and by splaying the form of his own building at 45 degrees to match the History Faculty and avoid a few listed trees, he has created a breathing space – not quite courtyard, not quite square – in which all the buildings can co-exist in something reasonably close to harmony. Part of this sensitivity to site may be due to Foster's Cambridge-educated partner in charge, Spencer de Grey.

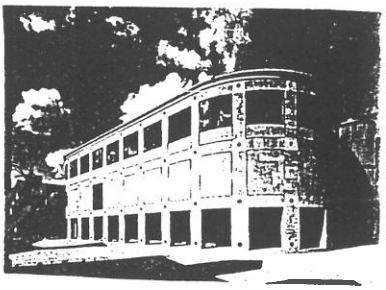
The Casson Conder raised faculty block is a particular beneficiary. Foster and de Grey have restored the stepped plinth on the western side and clad the Law Faculty's southern elevation in reconstituted stone and Cambridge blue panels of opaque glass with narrow clear glass vision strips. The two blocks are in dialogue, and will get on even better when the trees between them have a chance to mature. It is obvious already from this that the Law Faculty is a contextual building whose forms and materials have been influenced by its neighbours. The flat southern facade and the splayed western wall are the direct response to context. Only on the north elevation where the view consists of mature trees and (eventually) a lot more Foster buildings, has Foster had a chance to flex his muscles.

The result is one of those *tours-de-force* in steel and glass which is neither window nor wall nor roof but all three. Moreover its abrupt termination along the southern facade gives a hint of what might have been – an all-embracing steel and glass enclosure vaulting effortlessly over the bookstacks within.

As built, perhaps the most delicate design problem has been to bring the disjunctive north and south facades together. This has been done by creating a prow at the western end of the building with an array of mullions stepping up to meet the curved edge of the steel truss. The wedge-shaped glazed atrium thus formed acts as the entrance, meeting place and collecting point of the whole building.

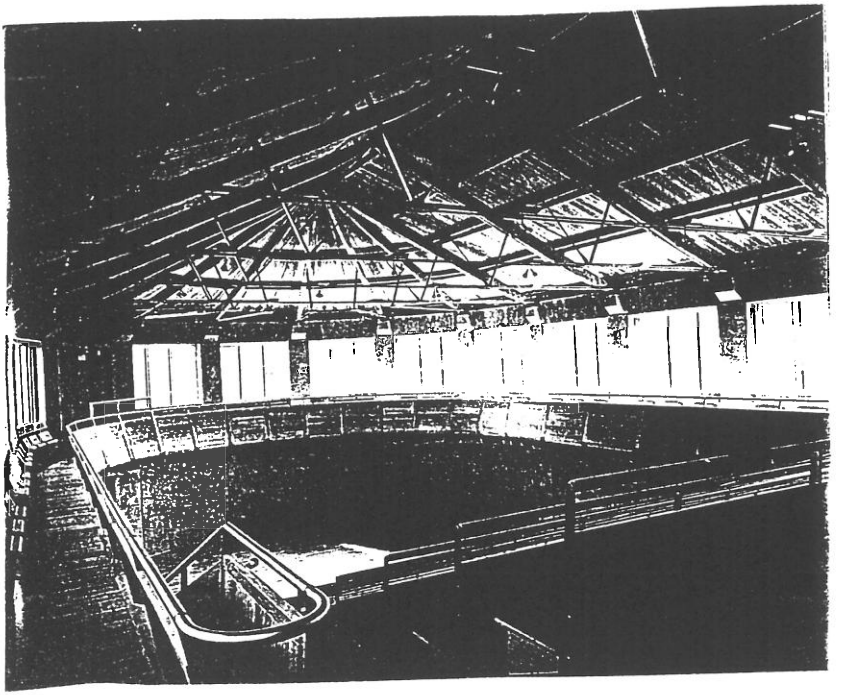
Entrances have not always been Foster's strong point. One recalls the hard-to-find, almost apologetic hole in the wall to the Sainsbury Centre, when the natural point of entry – since recognised by Foster himself – was surely the glazed southern end. At the Law Faculty, the entrance is certainly at the logical point on the campus – any *feng shui* spin doctor would have agreed on that. The problem is that it is also marked externally by an unexpected collision of forms and materials. There is a distinctly un-Fosterlike grinding of gears as steel roof truss, stone elevation and glazed wall all come together. This entrance is celebrated – if that is the word – by a slender steel column whose significance is obscure. Is it depending from the eaves as a tie, or is it lending structural support? The answer is neither. Apparently the sole justification for this insouciant appendage is that the entrance looks somehow incomplete without it.

Internally, the entrance foyer/atrium is certainly going to be seen as one of Cambridge's big interior set pieces. But because part of it is sunk below ground level, the visitor disconcertingly finds himself staring into a kind of trench for which, as yet, no satisfactory use has been found. The problem is one of conflicting functions. The faculty combines a library with teaching spaces. Undergraduates collecting outside the basement lecture halls, or milling around the entrance are apt to be noisy, whereas libraries traditionally demand silence. Any attempt at enlivening this void – by, for instance, filling it with paintings and sculpture, or a full-blooded canteen – would simply exacerbate what the faculty at present regard as a noise problem. Their fears may be exaggerated, however. On a recent visit, I found a lively seminar in progress with both doors open to the library spaces beyond. Nobody seemed to object to this, indeed it is possible that a certain amount of white noise may be beneficial, and that the gradual transfer from books to terminals may generate new patterns of study and new



A new theatre for Emmanuel College in Cambridge displays an astutely crafted material richness combined with a highly innovative structure.

This is a typical Hopkins building. More than that it is a kind of condensed summary statement of all the formal preoccupations, compositional habits, structural principles and material preferences of Hopkins' mature style. Most obviously, it is a miniature Glyndebourne Opera House (AR June 1994): a free-standing building, oval in plan, basically symmetrical about a longitudinal axis, three storeys high and with a performance space at its heart. And the similarities don't end there. It has a colonnade around the ground floor built of loadbearing masonry, it stands close to a collection of venerable buildings and it has a roof structure of combined timber and steel trusses. In fact, almost every feature of this building has a precedent somewhere in the recent Hopkins *oeuvre*. The layered lead roof, for example, can be traced back via the Inland Revenue building at Nottingham (AR May 1995) and Glyndebourne to its origin in the David Mellor factory. The circular fire escape stair tower, of glass blocks in a steel frame, comes via Nottingham, as does the technique



unprecedented in Hopkins' work. Curious, though, because this is a massive stone structure, it is also built as a frame of piers and flat arches infilled with non-loadbearing panels. Most architects would have expressed this structural distinction by setting the panels back from the frame, but Hopkins keeps them flush, framing them with narrow incised grooves and changing the bonding of the stone. Ever since he acknowledged the influence of Guarini's Palazzo Carignano on his design for Bracken House, it has seemed legitimate to cite Renaissance precedents for Hopkins' buildings. Here, the precedent might be Alberti's Palazzo Rucellai, a three-storey flush facade on which the Classical orders are 'drawn' in narrow grooves.

As at Glyndebourne and Nottingham, the masonry is loadbearing. This is part of the Hopkins credo: structural honesty and truth to materials at all costs. But the 400 mm thick walls are not capable of resisting the outward thrust of the floors and roof without some kind of reinforcement. They could be buttressed, but that would spoil the simplicity of form. Instead, tensioned stainless steel rods inside the piers counteract the outward thrust with a strong vertical compressive force corresponding to the force exerted by a pinnacle or buttress. This is essentially the same technique that Hokpins used at Nottingham, except that there, the piers were prefabricated and here they were made on site. The rods are anchored at each level in heavily reinforced precast concrete 'kneeling blocks' and are accessible via stainless steel tubes that register on the facade like dowels in a wooden chest. But it is not enough just to strengthen the piers. The arches at the ends of the building are curved in plan and therefore have a tendency to burst outwards. (Wren, incidentally, avoided this problem at the Sheldonian by making the wall faceted rather than curved.) The wall, therefore has to be held in by the concrete floors, by the gallery of the auditorium and, at eaves level, by the precast concrete gutter/cornice that acts like the restraining chains in a Renaissance or Baroque dome.

There are many ambiguities, many 'both-ands', in this building: it is austere, but sumptuous, structurally honest but supported by hidden steel members, massive but delicate, traditional in concept but modern in execution, monolithic but permeable. This is its richness, not just a richness of materials and craftsmanship, but a richness of ideas and imagination.

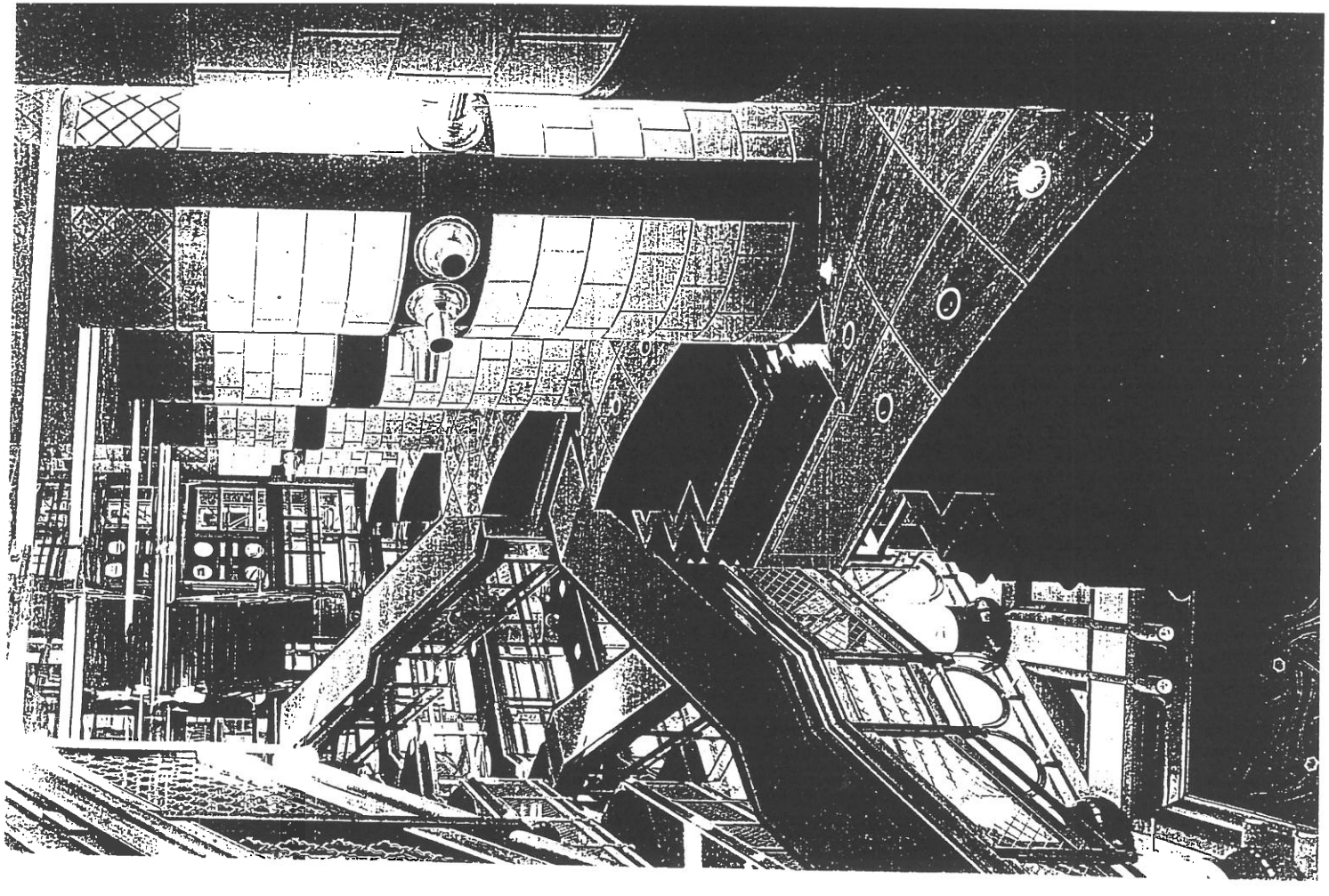
of steel-tensioned masonry (of which more later). One would say that the building was a montage of Hopkins motifs, were it not such a unified, monolithic form – more like a beautifully crafted piece of furniture than a building.

There are also indirect historical precedents. Viewing the building over the railings from Emmanuel Street, its resemblance to the north end of Wren's Sheldonian Theatre in Oxford is striking. The function, too, is similar, though in the Sheldonian, the auditorium seating occupies the curved end of the building, like a Roman theatre, whereas in the Queen's Building, the arrangement is reversed, with straight rows of steeply raked seating facing into the curve. The echo of the Sheldonian is surely not coincidental, given the proximity of the Wren Chapel, the Baroque, porticoed facade of which forms the centrepiece of the college's main quadrangle called Front Court. The chapel is built of Ketton limestone, and this is also the dominant material of the Queen's Building.

The auditorium seats 170 people, for lectures, college ceremonies and chamber concerts. It is a simple, two-storey D-shaped space, surrounded by a narrow gallery with large windows allowing views of the sky, trees and neighbouring buildings. Only three materials are apparent: stainless steel for the tensile members of the exposed roof trusses, stone for the walls, and American White Oak for everything else. Most of the other spaces in the building are single-storey, flat-floored versions of the auditorium. They are designated as common-rooms and reception rooms, but are also potentially little theatres.

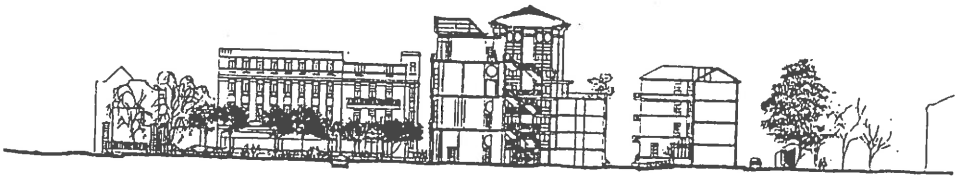
Though this is a free-standing building – unusual in Cambridge – it is nevertheless decently scaled and fits comfortably into its surroundings, creating a subtle, formal link with North Court on the other side of Emmanuel Street. North Court is reached via a pedestrian underpass, connected by an arcade to the corner of New Court. Hopkins has refaced this arcade in stone and taken a footpath from one of its arches right through the new building to a gate in the wall of the Fellows' Garden. The entrance to the new building is placed where the footpath crosses the longitudinal axis and is therefore buried in the middle of the plan. There is no canopy or portico of any kind; nothing to disturb the completely smooth, flush face of the monolithic form.

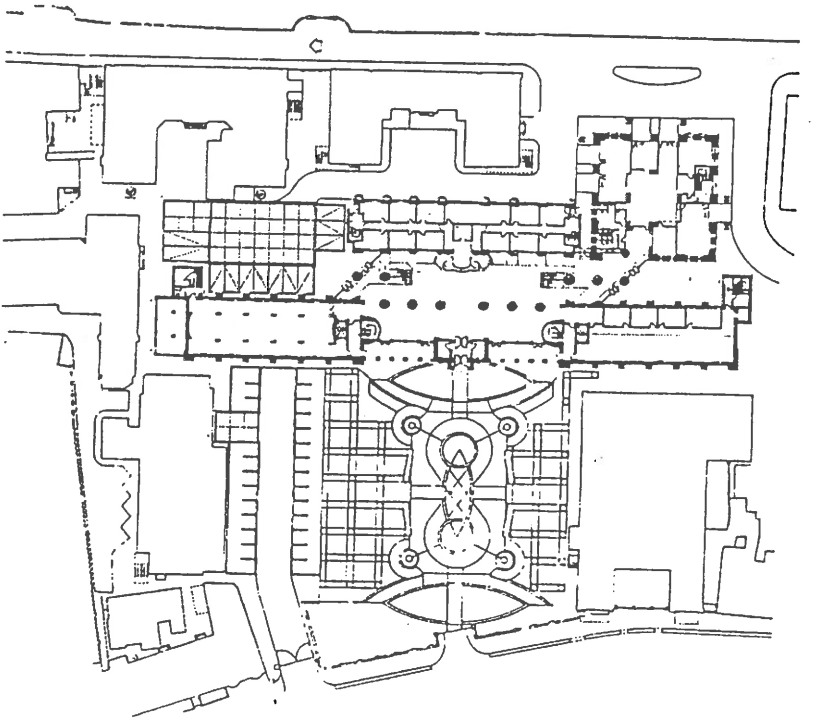
This smoothness is the building's most curious feature, and for once it seems to be



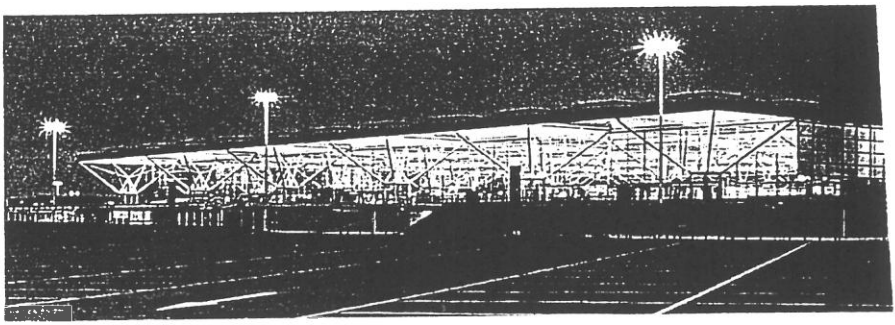
The Judge Institute, Camebridge University (1996)

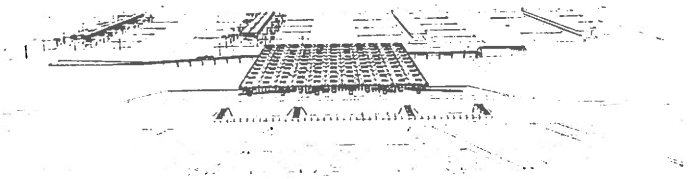
John Outram Associates



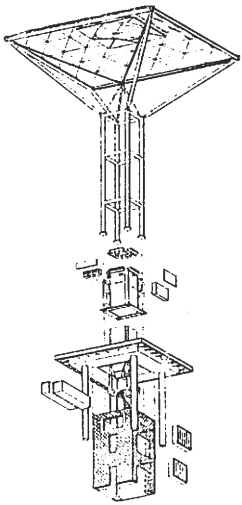


Stansted Airport





Foster Associates 1985–1991



ABOVE: Site Perspective. BELOW: Terminal structural tree and services POD

Stansted Airport

There has been a runway at Stansted since 1942. In 1953 Stansted was singled out as London's potential third airport. Forty years and several public inquiries, reports, and committees later, the new terminal was opened by HM The Queen. Foster Associates became involved in the project in 1981. During the long gaps while decisions were being made in Whitehall the time was used positively to develop a good relationship with the client.

The main design concept for the airport derived from Foster's own love of flying (he would travel to the site, stress-free, in his own helicopter) and the simplicity of early airport terminals. The open fields of Stansted invited a low, single-storey building with a roadside entrance and car park on one side and the runway and aeroplane satellites on the other.

Travellers by rail arrive underneath the building and are transported via an escalator or lifts directly into the main concourse. Check-in, shops, security areas and departure lounge are arranged in a linear fashion to avoid excessive signage and disorientation, with views out to the runway. A monorail shuttle whisks passengers to the adjacent satellite for boarding. This ease of passage was greatly informed by many hours spent in airports whilst the architects flew back and forth from Hong Kong during the construction of the Hong Kong & Shanghai Bank.

The vast open space of the main building is clearly articulated by the spectacular roof structure which floats more than 15 metres above our heads. A quilt of square domes is supported by a grid of 36 service trees. The white roof membrane (perforated steel trays and insulated Sarnafil PVC) filters light down onto the grey terrazzo floor and reflects light from inside. The domes also act as smoke reservoirs with extractor fans built into the top of each tree. Another significant achievement in the design of the roof is the syphonic draining system which allows drainpipes to