

THE ARCHITECTURAL REVIEW

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METROPOLITAN LINES

London's Jubilee completed

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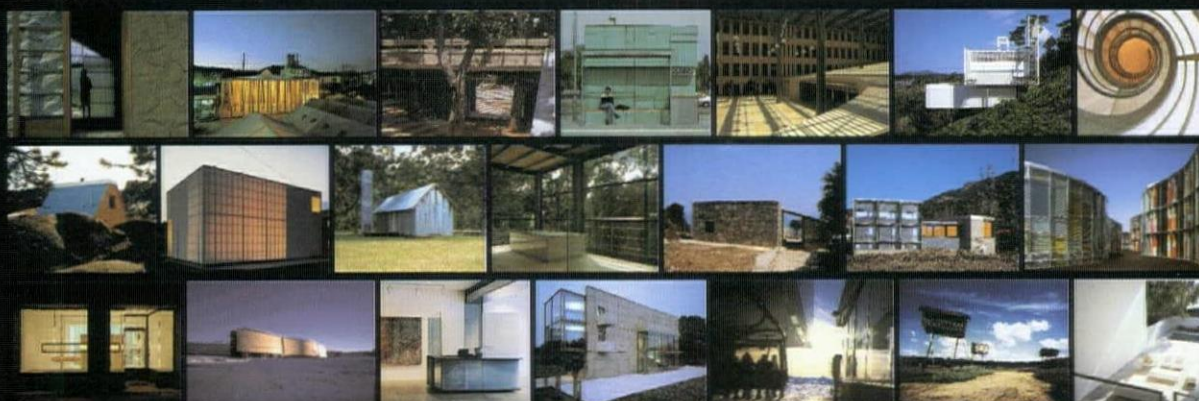


ar+d 2000
Emerging Architecture

The world's leading emerging architecture award

Inaugurated in 1999, the ar+d award was conceived by The Architectural Review and d line™ *international* as, the distinguished Danish architectural design firm. Intended to bring wider international recognition to a talented new generation of architects and designers under 45, it attracted entries from over 50 countries, representing every continent. Work submitted ranged from small domestic conversions to large public buildings, light fittings to landscapes.

Winning entries 1999

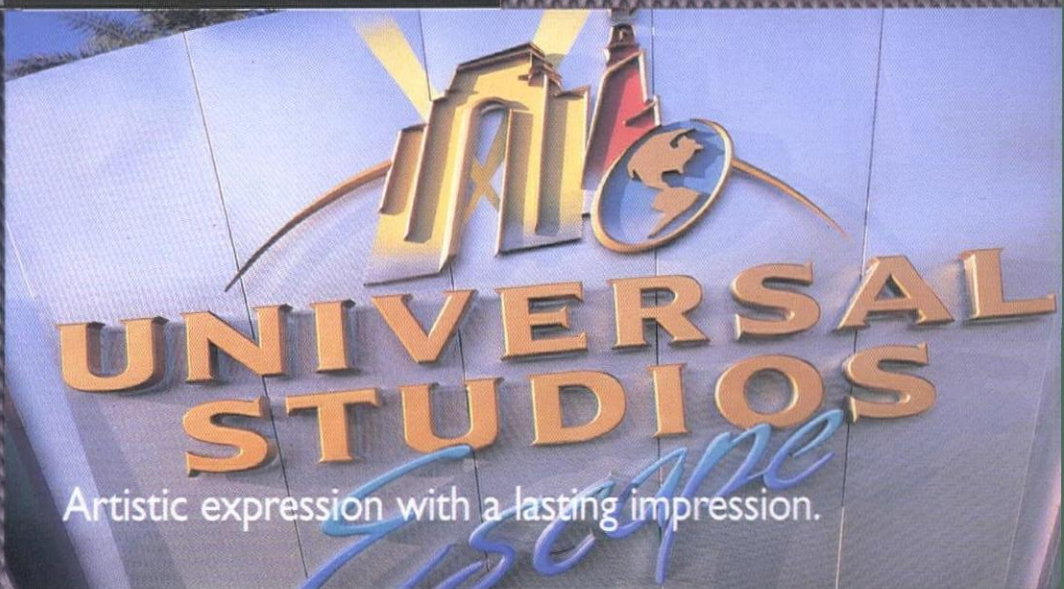




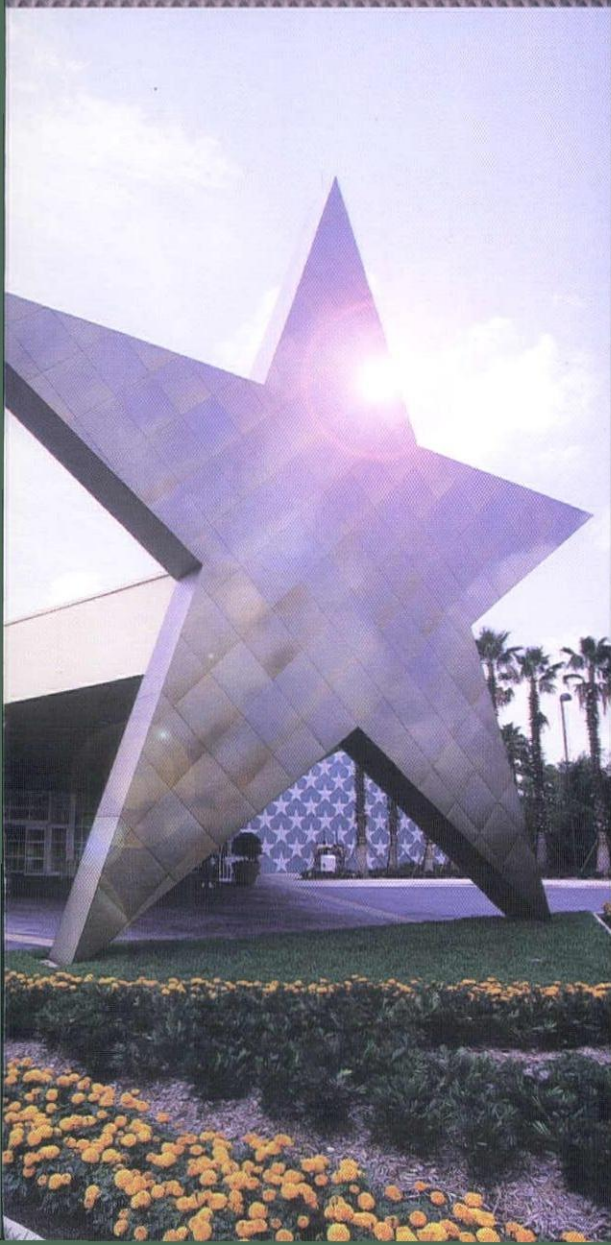
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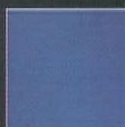


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Rotterdam, The Netherlands

ADALBERTO DIAS

Adalberto Dias Architect Ltd,
Oporto, Portugal

PETER DAVEY

Editor of The Architectural Review

ELIGIBILITY

1 Who Can Enter

Architects and other design professionals whose qualifications are recognized by their local accreditation organization, provided that they are 45 or younger during the Year 2000.

Entries are encouraged from individuals, groups, partnerships, and those working for larger practices. Those working for larger practices must provide written evidence from their principal in the employing office guaranteeing that the work is that of the entrant(s).

2 Completed Work

ar+d emerging architecture celebrates excellence in completed work. Entries can be made for any building, interior, landscape, urban or product design.

3 Age Restriction

The age limit has been chosen on the basis that many emerging architects are unable to realize designs or develop an original vision before that time, either because of the long education and training period, or because of lack of opportunity.

4 Categories

Categories will not be decided beforehand, but decided on by the Jury. Entries to the 1999 award represented some of the following areas:

- Buildings – new build and refurbishment: offices, shops, schools, houses, housing, industrial, transport, restaurants, recreational, cultural, municipal and religious
- Interiors – new build and refurbishment: similar to building category, in particular restaurants, shops, houses, clubs and galleries
- Urban design
- Product design – light fittings, architectural design, furniture, cladding, and structural systems
- Street Furniture – lights, bus stops, bollards, post boxes, signs
- Landscape – soft and hard
- Bridges
- Temporary or portable structures – exhibition stands

WINNING ENTRIES

5 Prizes

The total prize money is £10 000 sterling with the overall winner receiving £5000. The Jury may choose a number of other winners and highly commended entries (there were 20 winners in 1999).

6 Publication

Winners of the ar+d emerging architecture awards and others highly commended by the Jury will be published in the December 2000 issue of The Architectural Review and on the ar+d Internet site, www.arpld.com.

7 Prize Giving Ceremony

The ar+d emerging architecture prize giving will be held at the new Danish Design Centre in Copenhagen on 26 October. The overall winner will receive a trophy designed by Knud Holscher, and will be invited by The Architectural Review and *d line™ international* as to the event.

8 Worldwide Exhibition

Winning and other highly commended entries will be exhibited at the prize giving, and subsequent exhibitions in major cities worldwide (schedule to be confirmed). Winning boards may be reproduced to protect originals.

9 Other Media

The ar+d team will provide information on all winning entries to other architectural magazines, newspapers and relevant media worldwide. Please help us by choosing your preferred local media on the entry form.

10 Providing Additional Materials for Publishing

Additional photography, drawings and other information from winning entrants will be urgently requested for the December publication during the week beginning 1 October. Entry will acknowledge that The Architectural Review and *d line™ international* as have the right to reproduce materials in whole or part without payment of copyright (where we are made aware of their names, photographers will be acknowledged).

ENTRY REQUIREMENTS

11 Entries

The maximum number of entries from any individual, group, partnership or larger practice is three – with each entry showing only ONE scheme. As there is a new Jury, work entered for the 1999 award may be re-submitted on new boards. Incomplete work, unrealized schemes, projects, CD-ROMS, videos, transparencies, models, prototypes and multiple schemes entered on one board will NOT be accepted.

12 No Entry Fees

There are no entry fees to the ar+d award to encourage the widest possible selection of entries from around the world.

13 Boards

Each entry should be mounted on two A2 sized boards, and must include photography (in either colour or black and white), drawings, and if appropriate a brief written description in English. The identity and location of the submission is helpful to the Jury. Maximum board size (portrait) is 420mm x 594mm or approximately 16.5in x 23.4in – preferably lightweight art board or equivalent.

14 Anonymity

To ensure anonymity in judging, no names of entrants or collaborating parties may appear on any part of the board. On receipt, each board and entry form will be allocated a

number allowing identification – for extra security please include your international telephone number on the back of the board. Only after the Jury has made its decisions, will the identity of the winners be revealed.

15 Entry Forms

Each submission must have a separate entry form. All entrants must be named in the submission. Please copy the entry form where necessary. Complete the forms clearly and enclose in a sealed envelope attached to the board.

16 Entry Deadline

Deadline for receipt of entries is 12 September. To ensure timely receipt, we recommend using a carrier that guarantees delivery. All entries received will be acknowledged on our website at www.arpld.com/received.htm as soon as possible after the deadline.

DELIVERY AND COURIER

17 Send to:

Entries should be properly packaged and clearly marked 'ar+d' on the outside. They should be sent to:
**The Architectural Review,
151 Rosebery Avenue, London
EC1R 4GB, United Kingdom.**

18 Documentation

Please ensure that entries are delivered by the closing date. Entries posted on the closing date will be accepted but must be received before 15 September. IMPORTANT: Your entry must be marked as NCV (no commercial value) on any courier documentation – the ar+d emerging architecture award will NOT accept any courier charges or taxes resulting from delivery. Personal deliveries to the AR editorial offices are accepted during normal working hours.

19 Return of Entries

Entries will not be returned. The ar+d emerging architecture award assumes no liability for loss or damage of entries.

**To receive an Entry Form please call +44 20 7505 6725 fax +44 20 7505 6610
email: neil.williams@ebc.emap.com or directly from our website at www.arpld.com**

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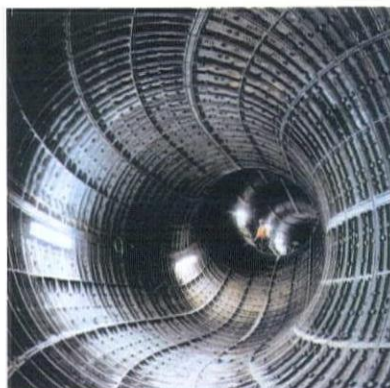
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 CONSTRUCT



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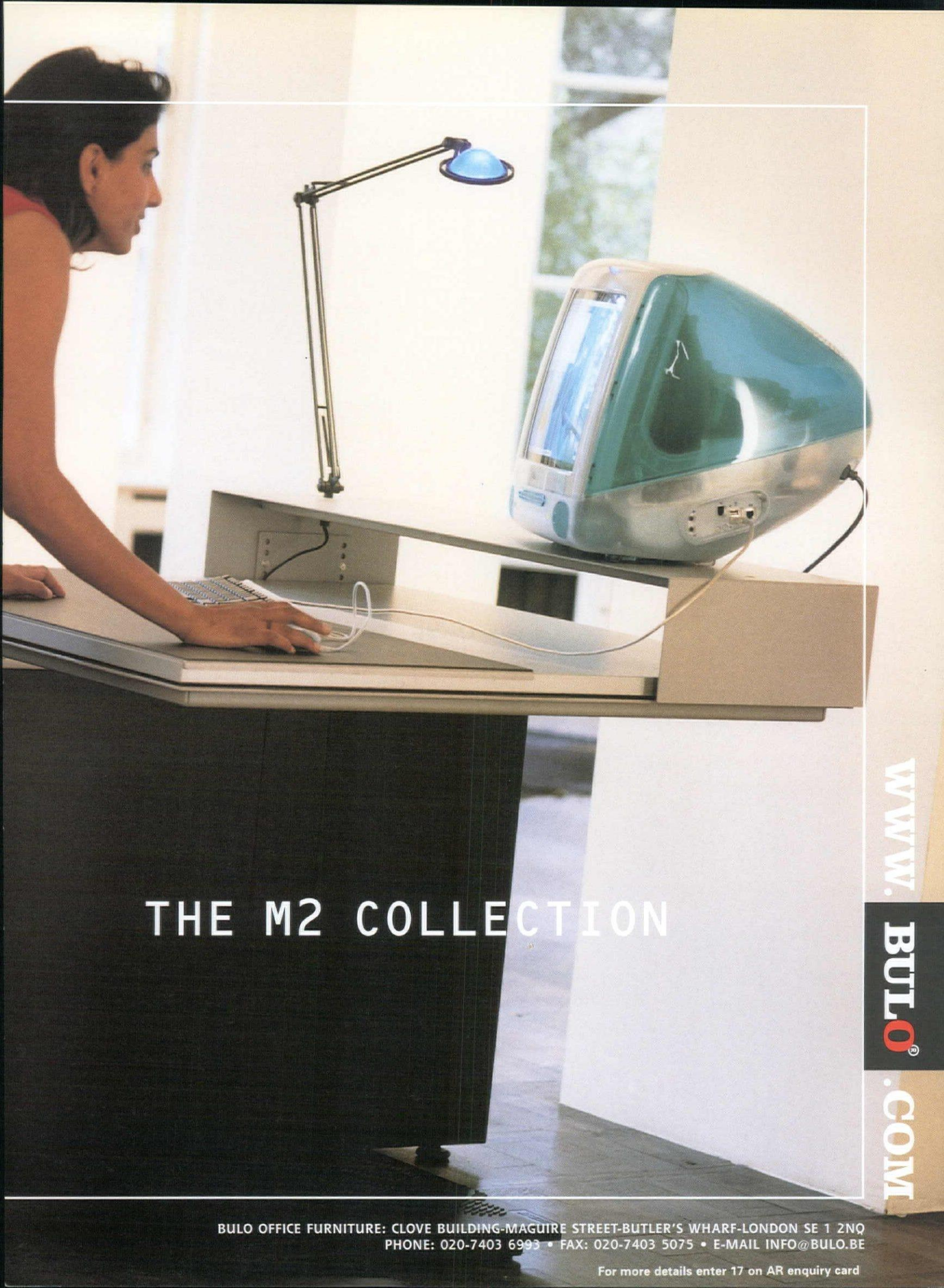
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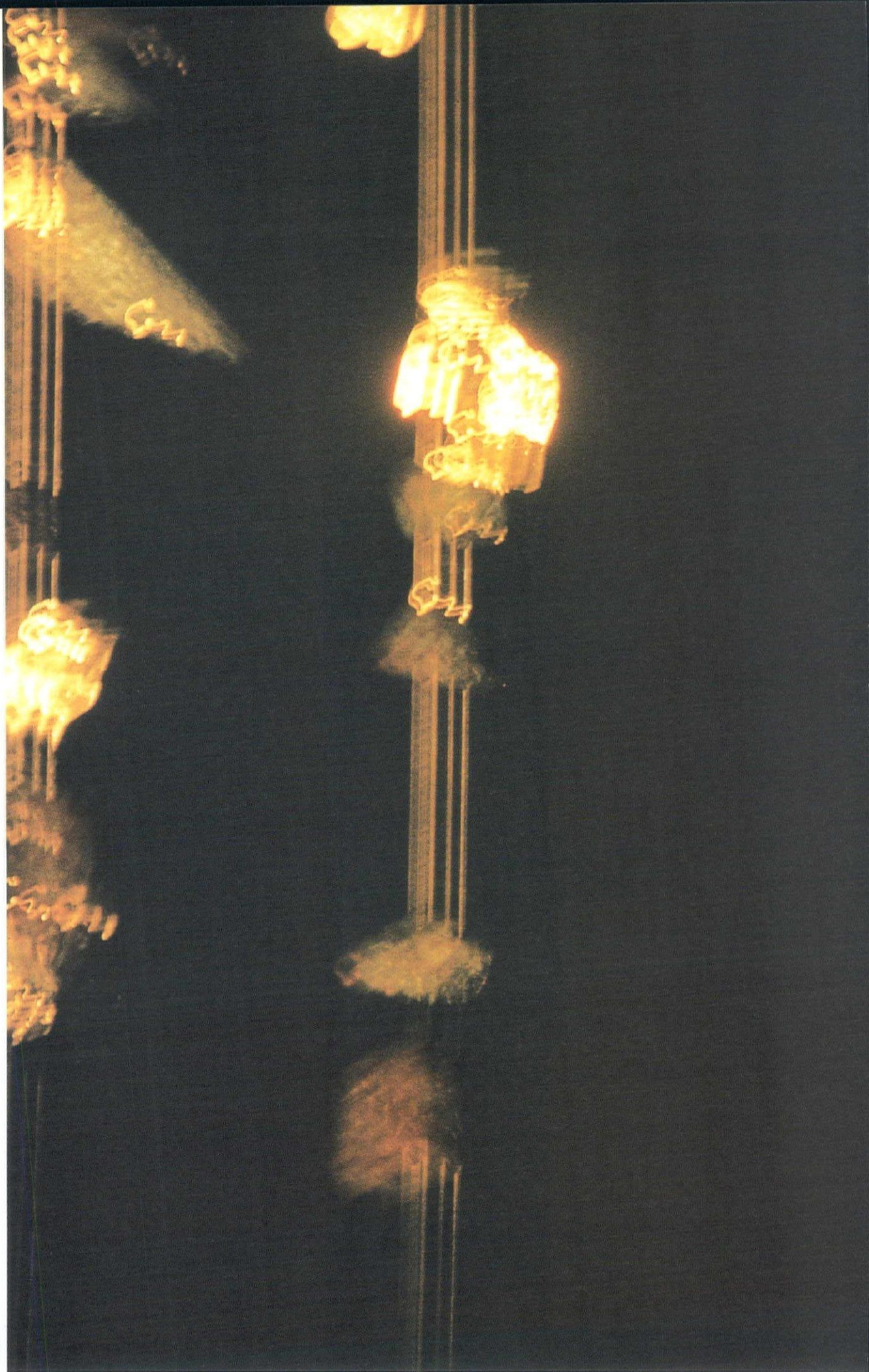
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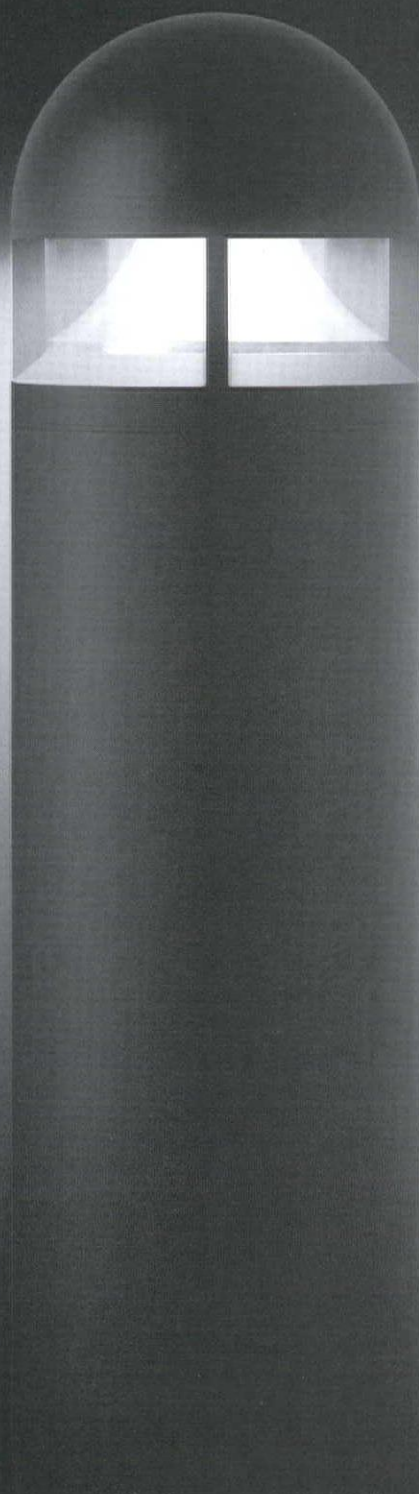
LOOK, LEARN.
THAT'S WHAT WE HAVE DONE.

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HUMAN BEINGS NEED 1/4 OF THEIR ENERGY TO SEE.



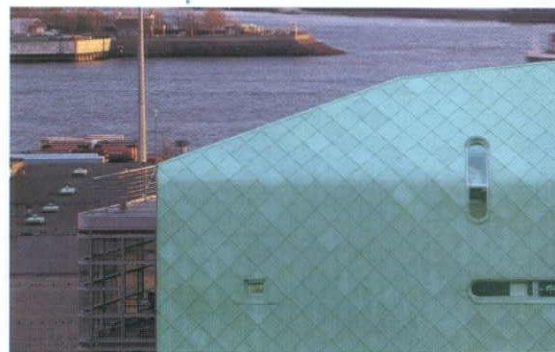
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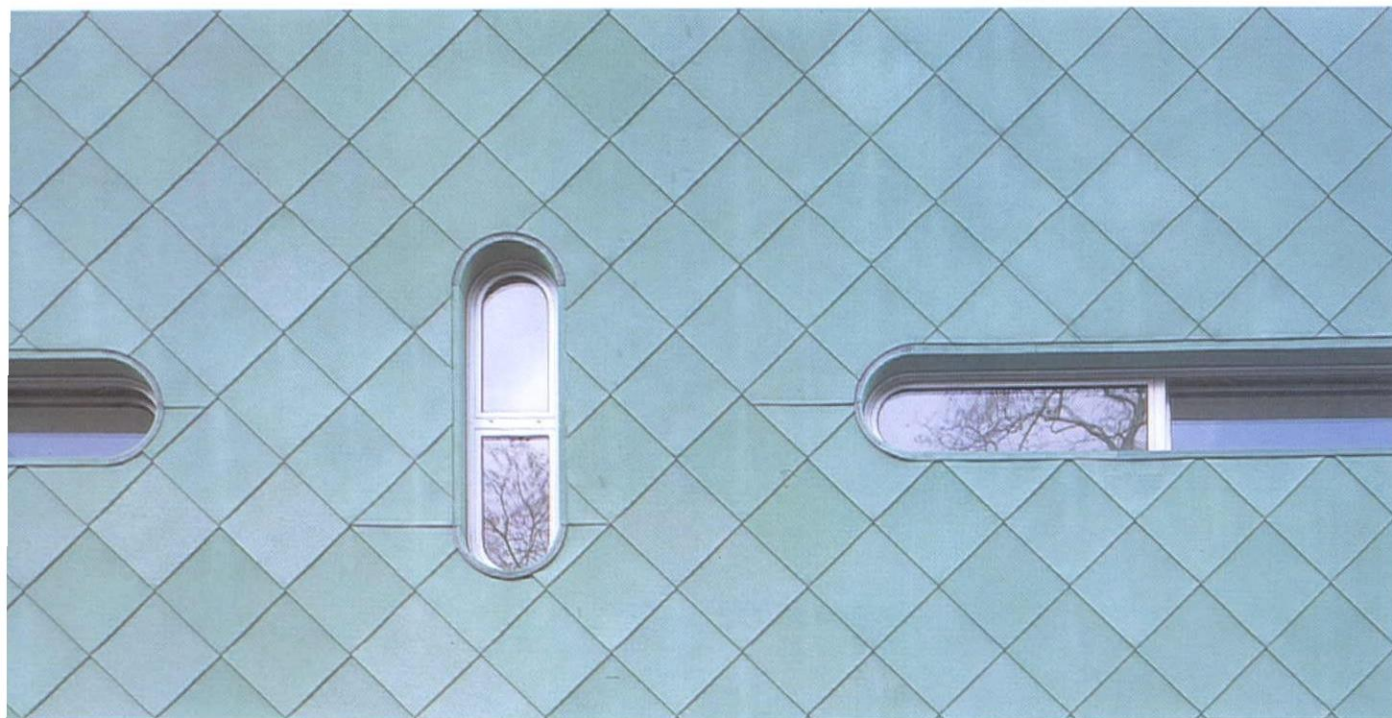
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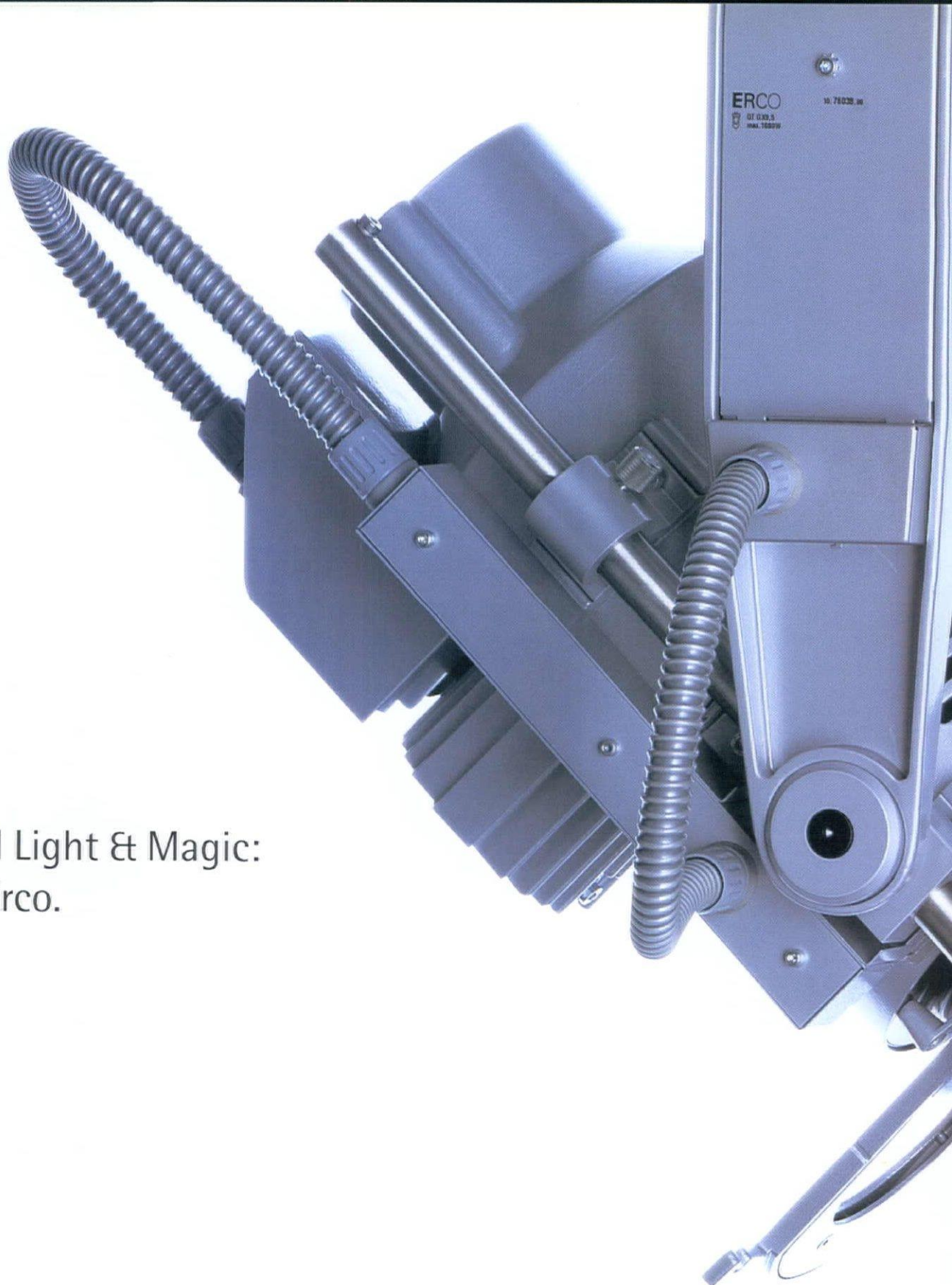
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Future Office Dynamics



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Working environments in the process of change - fit for the future?

Developments in communication and information technology lead to fundamental changes in the parameters which have so far determined the organisation and planning of office work. Regardless of whether work is organised in the form of a mobile office, desk-sharing, non-territorial office, telework, home office, cooperative buildings, a virtual office and so on, one thing is sure, namely, that work of the future will be characterised by a dynamism and flexibility which extends far beyond existing structures of

organisations and buildings. It is no longer possible to develop isolated solutions in individual specialist fields which can satisfy the complex interplay of the factors involved in work: humankind, organisation, technology and architecture.

Four organisations and companies, that are leaders in their respective field, joined forces at the beginning of 1999 to form a partnership entitled *Future Office Dynamics* (FOD). It aims at covering the core areas that are relevant to the development of an all-embracing concept of future working environments:

- the Nemetschek AG has adopted the term "Future Technologies" to focus on software integration with a view to correlating design, detail planning, engineering, execution planning, commercial data, project planning and facility management using one user interface
- the Quickborn Team, one of the leaders in the planning of work, organisation and space utilisation concepts
- the Institute for Integrated Publication and Information Systems (IPSI) of the GMD Research Centre for information Technology has made a name for itself in the world of science and research with its



FOD - ConnecTable - Stephen Sitzen Sitzen



FOD - Interactable



FOD - Interwall



FOD - Commchair

concept of "i-land", an interactive environment for cooperation work.

- Wilkhahn is known internationally as an innovative specialist for design-oriented contract furnishing, and has won acclaim in the field of developing process-oriented interior concepts for furnishing communication areas with its Confair range and the publication of a comprehensive interior and specifiers' handbook.

The research and development partnership *Future Office Dynamics* (FOD) organised an interdisciplinary congress in Berlin in October entitled "Work environments in the process of change - fit for the future?", in collaboration with the Berlin Chamber of Industry and Commerce, the International Design Centre in Berlin, the German Publishing Association and the Association of German Architects and Engineers. The congress documented the first results of FOD on the subject of cooperation work environments and presented a summary of the various theses of leading national and international speakers and experts. The interplay of architecture, organisation, technologies, design of work environments and social needs can be seen in a cross-section of papers and reports from the field of research, industry and service sector, as well as in practical examples of new forms work. The highlight of the congress was the presentation by Future Office Dynamics of a work environment which integrates interdisciplinary innovation resulting from process organisation, communication and information technology and human interfaces in a cooperative work environment - the first of its kind

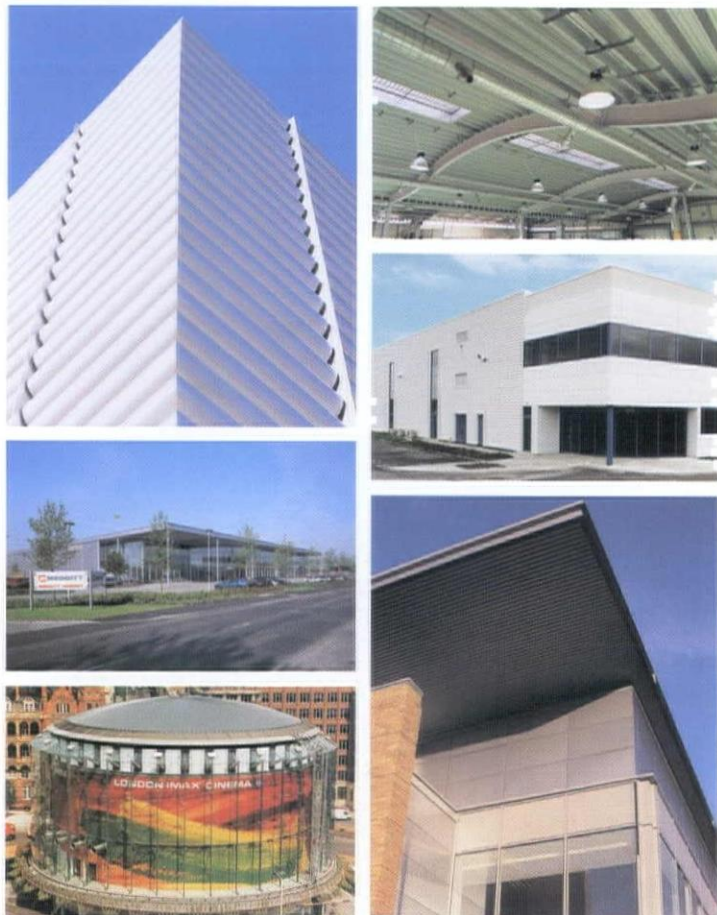
worldwide. FOD shows function studies of new roomware components, developed jointly by Wilkhahn and GMD-IPSI, embedded in concrete scenarios of cooperative teamwork. Innovative information and communication technologies, which are tuned to the organisation, methodology and dynamics of group communication and work processes, are integrated in these roomware components (e.g. walls and furniture). Real team interaction and the virtual world merge to form a completely new quality of work. In terms of team processes, the impact and potential of this development are comparable with the changes which the introduction of the PC once meant for individual work.

The FOD partners define Roomware as the integration of spatial and physical structures such as walls, doors, furniture (e.g. tables and chairs) with information and communication technology. This is based on the proposal that the "world around us" will become the interface for interaction with information, and for the cooperation between humans in future work environments. In this approach of augmenting reality, the functionality provided by the computer is, however, constantly accessible ("ubiquitous computing"). The Roomware approach goes far beyond the limited use of desktop computers at individual workstations.

Roomware components are interactive and networked, some are mobile as they communicate via wireless networks and have a autarkic power supply. They are also equipped with sensor technology which allows dynamic and flexible configuration options and adaptive environments.

For more details on this subject please refer to Internet web site: www.future-office.de or contact: Wilkhahn Wilkening+Hahne GmbH+Co, Im Landerfeld 8, 31848 Bad Munder, Tel. +49 5042 999 118, Fax. +49 5042 999 245

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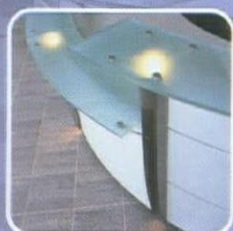
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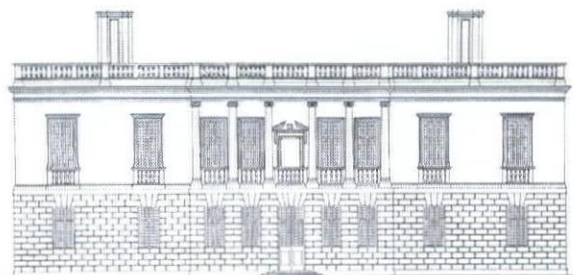
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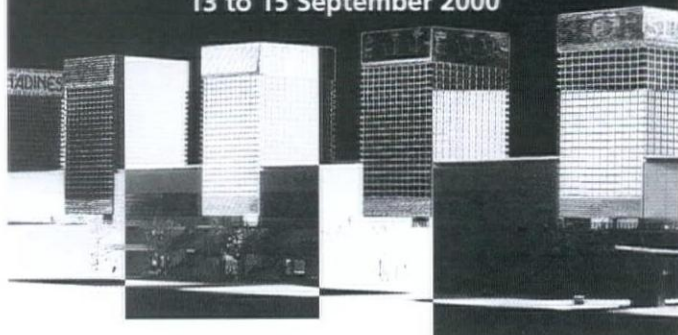
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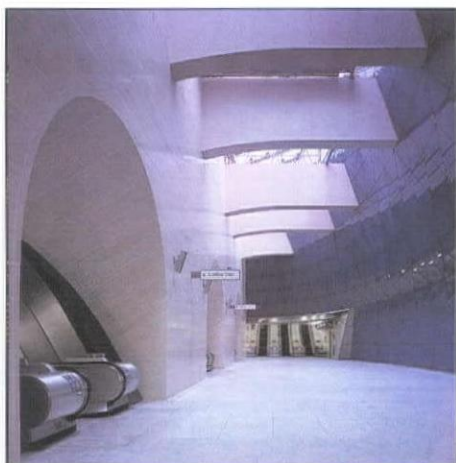
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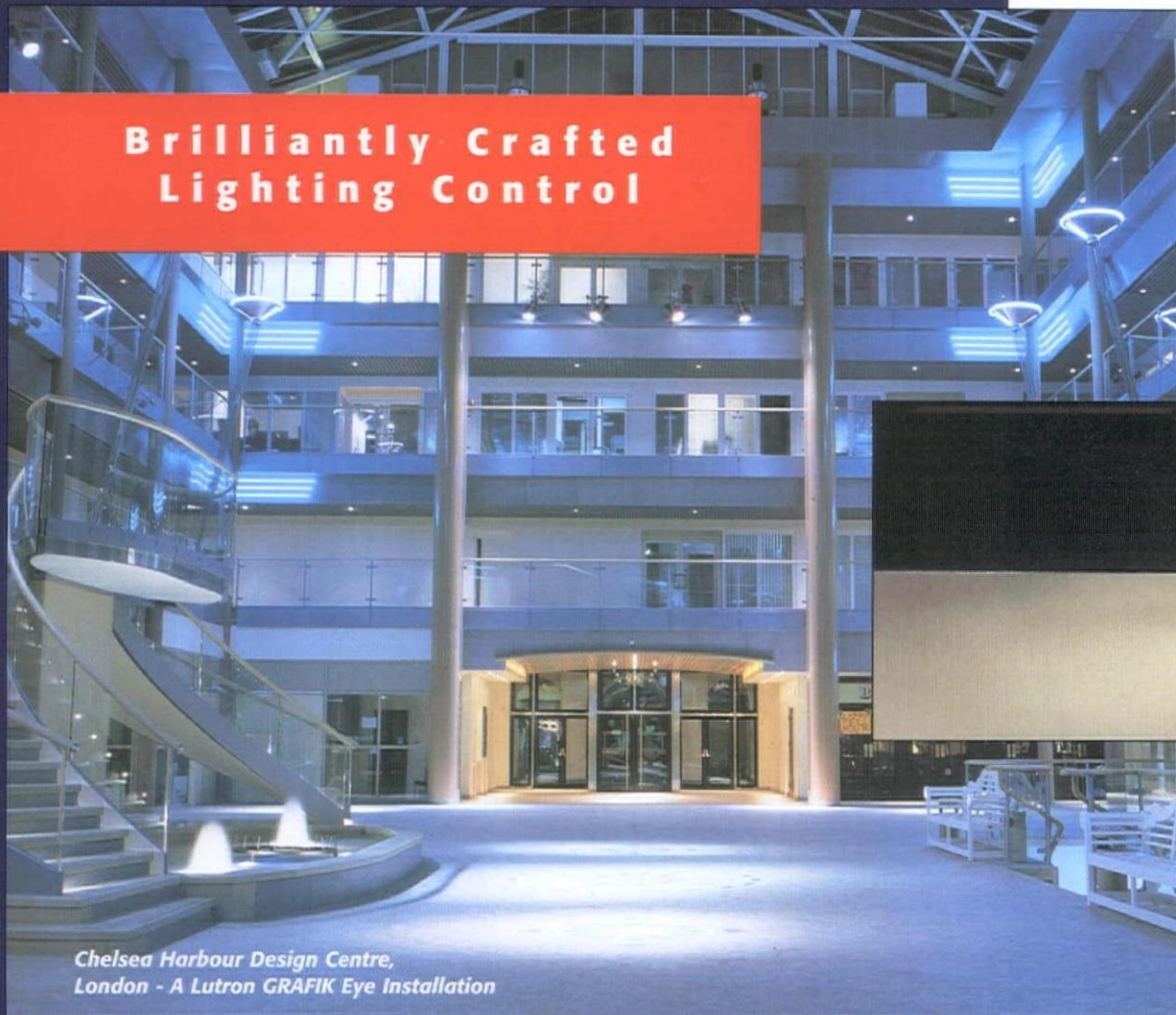
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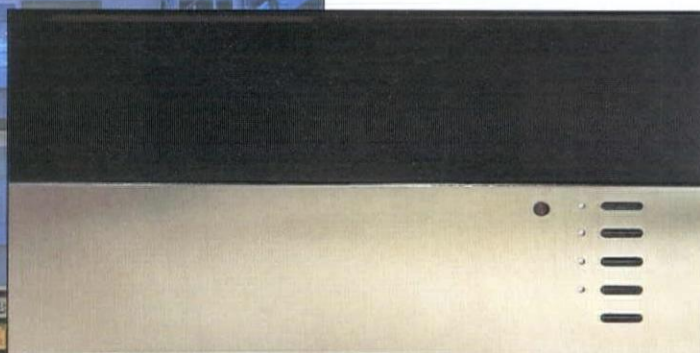
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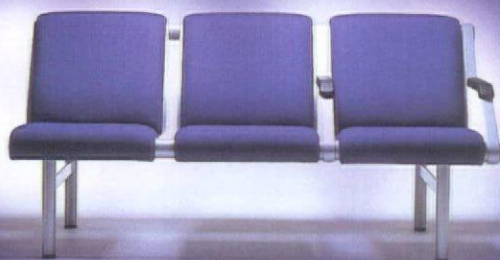
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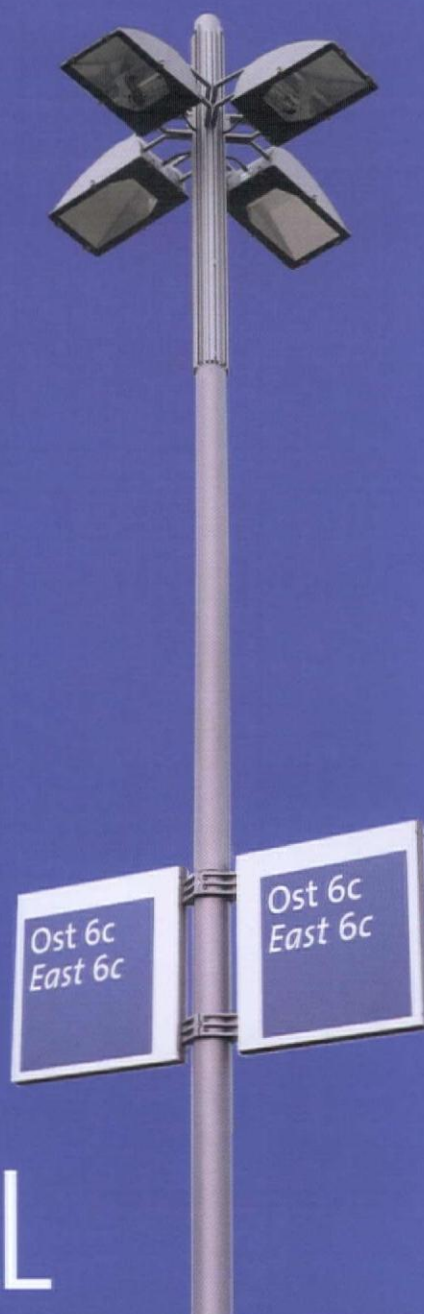
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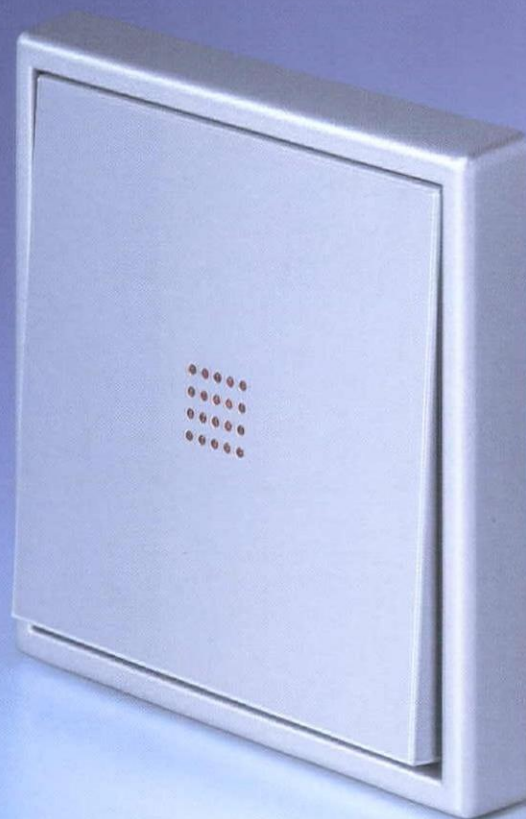
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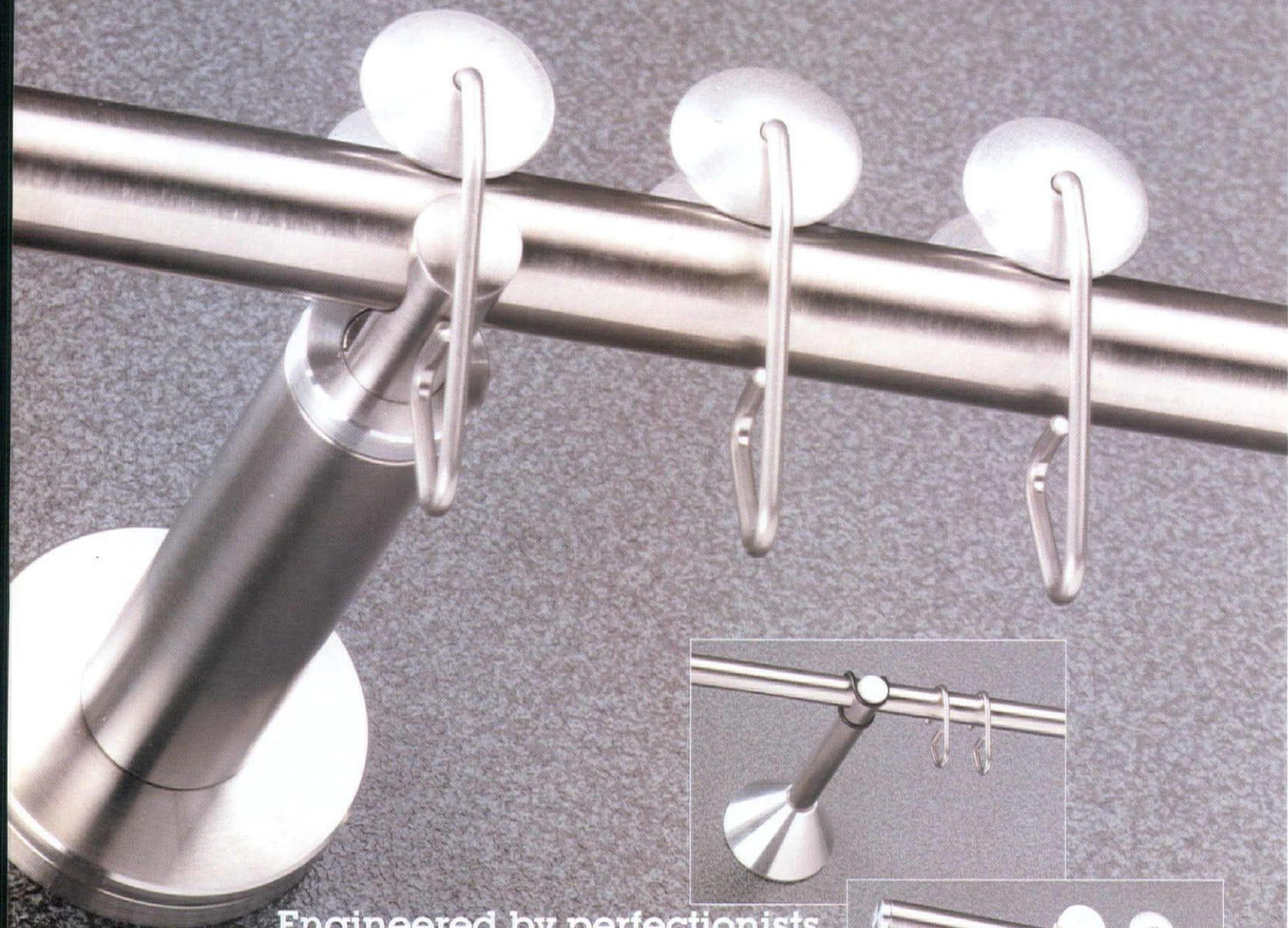


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view

E. W. GODWIN, FORGOTTEN MASTER OF NINETEENTH-CENTURY AESTHETIC MOVEMENT, MIRACULOUSLY BROUGHT TO LIFE IN NEW YORK. HANOVER EXPO 2000 BURSTS OUT ON INTERNET. VIRGIN AT THE BAR. FRANK GEHRY GETS RIBA GOLD MEDAL AND REM KOOLHAAS GETS THE PRITZKER PRIZE. BOSTON LOSES ITS ARCHITECTURAL DIRECTION.

At one time, a walk down Tite Street in London in early evening with a view into the lighted interiors of half a dozen artists' studio houses would have told the story of the life and times of the architect Edward William Godwin (1833-1886). Failing that, since only two structures remain, a visit to an exhibition in New York called *E. W. Godwin: Aesthetic Movement Architect and Designer* achieved the remarkable goal of conveying his pivotal but nearly forgotten career as an architect, interior decorator, furniture designer and theatrical producer.

Organized by the Bard Graduate Center for Studies in the Decorative Arts, the show was mounted in galleries that also happen to be beautiful rooms in one of Manhattan's mid-block Beaux-Arts limestone mansions. Susan Weber Soros, who founded the Bard Graduate Center in 1993 for the study of the cultural relationships between the decorative arts and society, was herself the scholar and guiding light behind this exhibition that revealed Godwin's multi-faceted professional life.

He began his practice in Bristol specializing in ecclesiastical and Gothic-Revival municipal architecture and ended at the threshold of a Modernism based on the simplicity and asymmetry of Japanese design. In 1998, Soros, who also maintains a residence in London, completed a doctoral dissertation at the Royal College of Art 'The Secular Furniture of E. W. Godwin', now a *catalogue raisonné* published by Yale University Press. This beautifully illustrated and annotated volume along with the exhibition catalogue (also Yale), for which she enlisted essays from nine other specialists, will guarantee that this highly creative and colourful personality will no longer be overshadowed by William Burgess, William Morris or others of his generation. (See Mark Girouard's review of the books on p96).

One of the curiosities of the nineteenth century, when travel for education was usually restricted to visiting ruins in Britain, France and Italy, was how exotic influences and objects from the East, specifically those from Japan, were embraced and reinterpreted in the decorative arts without a thorough understanding of their original context. In a sense, Godwin did for furniture what René Lalique in France did for jewellery by taking recognizable



Frank Miles' house, Tite Street (1878) - rejected version.

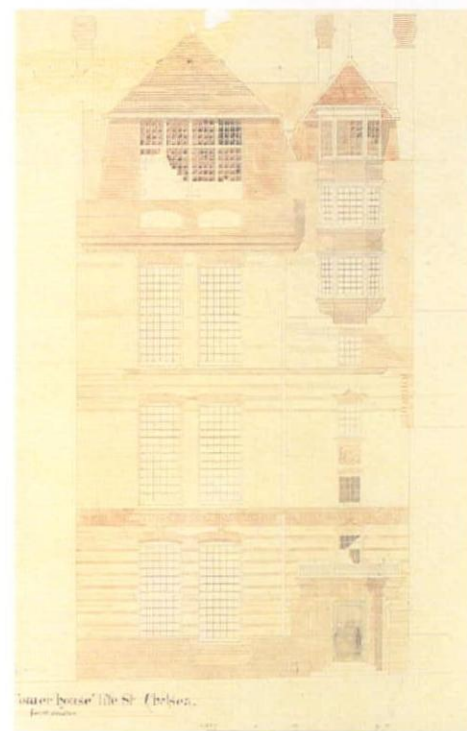
Western forms and rearticulating them to suggest a new linearity and composition that was unmistakably Eastern. Most of traditional Japanese furniture consists of storage chests, but these are often decorated with hinges and other intricate hardware and stacked in formations that are conveyed in Godwin's c1877 elegant, two-tiered sideboard of ebonized mahogany with brass handles that was the centrepiece of the show. A side table, long on view at the Metropolitan Museum of Art, with staggered, folding shelves, fretwork stretchers and delicate brass fittings, took on a new life seen in the context of his other Anglo-Japanese work.

By incorporating not just drawings and photographs of buildings but also wallpaper samples, textile designs, ceramics, furniture and decorative schemes among the 150 exhibits on view, Bard succeeded in creating a kind of theatre in the round, an inside/outside look at the Aesthetic Movement's intense engagement with artistic style. Rarely do shows on architecture and design rise to this level of selectivity that makes the work both understandable and memorable. Photographs and drawings of his Northampton Town Hall (now the Guildhall) in the Neo-Gothic style based on Ruskinian principles were next to the thronelike mayor's chair in oak with inlaid decorations that gave the measure of the building with its bandings of coloured stone and figures of kings and queens on the facade.

Godwin's theatrical productions and cos-

tumes filled one gallery of the show. Between his two marriages, he lived with the actress Ellen Terry for six years, and their red brick house in Hertfordshire was a laboratory of new ideas about bare floors and curtains. The doll-house-like elevation and plan was annotated so clearly with his innovations that a visual wander through gave an excellent picture of how they lived.

But no one had it better than the clients on Tite Street, Chelsea. The first version of the house he designed for James McNeill Whistler was rejected by the Metropolitan Board of Works but, even so, the finished product in white brick with a high, green-tiled mansard roof has the austerity of Modernism. But in designing his true masterpiece, for society portraitist Frank Miles at no 44, he composed a facade of interlocking rectangles of balconies and windows that recall the asymmetrical geometry of traditional Japanese teahouses. Even in the modified version that was built, his system of solids and voids, reflected in the interiors as well, would find its way someday, as the catalogue suggests, into the work of Le Corbusier. PAULA DEITZ



Tower House, Tite Street (1883). Shavian orthodoxy.

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view

browser

An excellent guide to the century's first architectural honeypot and a gallant attempt to make an international electronic magazine.

Expo 2000

www.Baunetz.de/expo/

Perhaps the most topical of all architectural sites at the moment is the Baunetz guide to Hanover Expo which opened on 1 June. It is remarkably thorough, with a complete list of pavilions: national, commercial and thematic. Using the national pavilion list for instance, you can scroll through all the designs, each with a small image and very brief description (including architects' names). These entries can be further probed individually, leading to further information on each site (usually with more images and extended descriptions), but these vary in detail depending on what the architects or countries have decided to make available. Searches can also be carried out by architects' names.

A remarkably thorough compilation by *Bauwelt*, the excellent German weekly architectural magazine, though at the time of writing, all buildings are shown graphically as projects and Baunetz/expo/ is in German. But even to a non-German speaker, its architectural coverage is a great deal better than the official Expo site www.expo2000.de which does have an English version and gives up-to-date information on events, tickets and so on, as well as background information on the whole affair.

Build It Worldwide

www.builditworldwide.com

Build It is a vast directory providing links to a huge range of firms and organizations round the world. The portal is divided into sections for design (Design It covering architects, consultants, and surveyors), construction (Build It, contractors and subcontractors), literature (Read It, magazines and bookshops), specification (Buy It, products and real estate), among others. Listings tend to be brief and factual, but links are given. Search facilities are quite sophisticated. For instance, architects can be looked up by name, country or specialization (though a lot understandably are unwilling to name only one or two areas of expertise). A growing site, constantly updated, biased to North America.

Design Architecture

<http://www.designarchitecture.com/>

Design Architecture is one of the most convincing attempts yet to set up an electronic international architectural magazine which is not

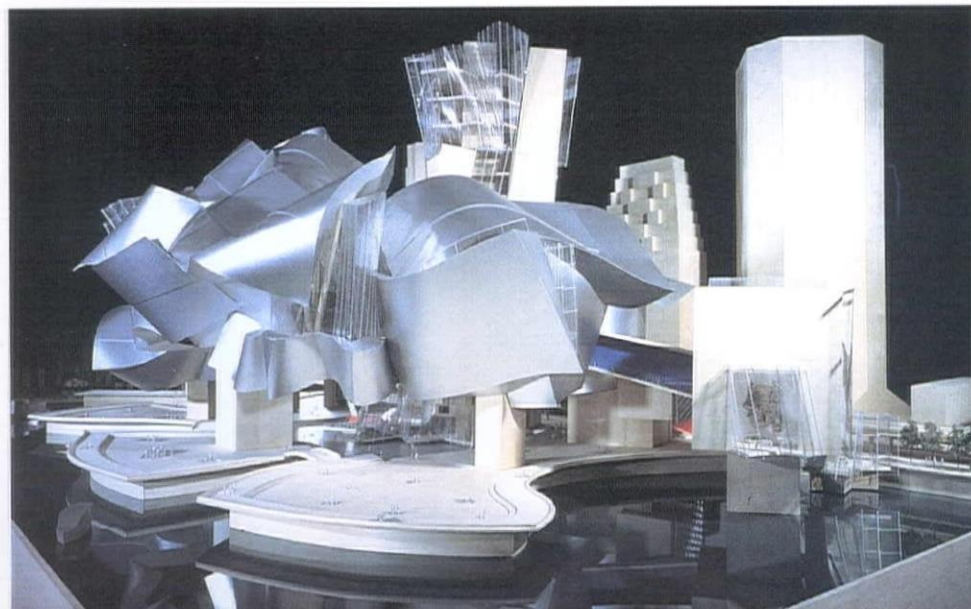
based on a paper original. Edited by Kirsten Richards in New York, the site has a roving reporter and European Editor in Chief, Kirsten Kiser, who writes cheery newsletters from for instance France and the Left Coast of the USA. These are illustrated with individual pictures and sometimes connections to architects' sites, which can provide a great deal more information about individual projects. Features are architect site orientated too, and tend to be either Scandinavian (Schmidt Hammer Lassen's television station in East Jutland for instance) or American. But there was a link to a Berlin gallery and the Bibliothèque Nationale de France.

The 'complete calendar' lists competitions, conferences and exhibitions, but like most of the other content (for instance news items), is limited to the USA and northern Europe. But news is updated daily and is usually worth a glance. As usual with the web, coverage of buildings is skimpy (no drawings for instance), but mentions can usually be followed up on paper.



As part of a £37 million relaunch, the Virgin Atlantic Airways Upper Class cabin has been redesigned by Lorenzo Apicella Associates. The spacious seats and cabin interior are decked out in metallic silver and chrome with red leather, complemented with warm purple textured fabric; and a luxurious new seat is being introduced which will transform amazingly into a 6'8" bed, recreating all the modern comforts of a hotel.

The centrepiece is a big streamlined bar surrounded by seven soft leather fixed stools for customers to drink, eat and socialize in comfort (turbulence permitting). A new lighting system creates eight different moods depending on the different stages of the flight experience: from dawn to dusk, and from restaurant to lounge. The design is intended to hark back to the romantic era of flying in the 1930s and '40s when, as in *Casablanca*, travel was glamorous and exciting. J. D.



Frank Gehry has been awarded this year's RIBA Gold Medal for Architecture. Gehry's reputation has steadily grown through a series of challenging projects that push the boundaries of form and materials. Pictured here is a model of the proposed new Guggenheim Museum in New York, a successor to Gehry's Guggenheim in Bilbao. Another major architectural gong was awarded recently; Rem Koolhaas is the latest recipient of the Pritzker Prize.

Archinet

www.archinect.com/about.html

You can get the flavour of Archinet as soon as you open it from its subtitle 'pimpin' architecture since '97'. Cheerful, eclectic, often irritating (try the opening graphics), sometimes fun and illuminating, the site is a contemporary descendant of '60s California, a sort of grandchild of The Whole Earth Catalog with Bill Gates somewhere in the lineage. Contents are often remarkably similar to what granny used to show 30 years ago: Arcosanti (the Venice workshop), Urbanizing Bamboo, Mobile Architecture and so on. Some of it is jolly good (very interesting to know what's happened to Arcosanti after all these years for instance, and there's a lot of potential in bamboo). Some entries are rather turgid, and others wonderfully pretentious. But if you've got the time to battle through the graphics, it's worth a visit; you'll certainly find surprises.

competitions

Latest international competitions for architects and students

BraunPrize

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Entry fee: None

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Jury: Chee Pearlman, Ross Lovegrove, Rainer Silbernagel

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Graphisoft Prize

Registration: 20 October 2000

Submission: 31 October 2000

Entry fee: None

Awards: \$10 000 in total plus software

Eligibility: Open to all architects and students

Jury: To be confirmed

The seventh annual Graphisoft Prize promotes innovative use of CAD software in architecture. The competition asks entrants to create imaginary architectural works from a list of cultural references. This year's selection includes The Ministry of Truth from George Orwell's novel *1984* and The Cotton Club from Francis Coppola's film.

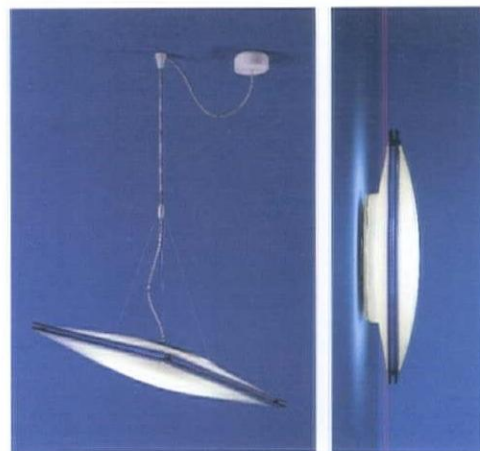
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letters

VITRUVIUS VERSUS ROSSI

SIR: If I recall it rightly, you said on one occasion that it is difficult to write about architecture, particularly in its critical appreciation. This is the case of the letter in AR March (p27) 'Outrage, outrage'. I have to defend your position in AR January (p23), when you rightly stated your view on Aldo Rossi: 'thoughtful writer about the city', but in his work 'exceedingly tough, inhuman and unipitying'.

Whoever preaches architecture and makes it real, has to be reminded that the deeds not words will judge his performance. Unfortunately Rossi's buildings and projects are not only out of proportion to human scale, but they fail simply to fulfil the Vitruvian credo of Voluptas. Their heavy-laden structures are alien to Firmitas in modern terms. Of course only the users can give us a proper answer on the Utilitas of Rossi's interiors and near urban approaches. Whoever has any doubt on above negative attribution, should take time to look through the book *Aldo Rossi - The Complete Buildings and Projects 1981-1991* (Thames and Hudson, London, 1992). He will not find on the 300 pages (23 x 30cm) of colour illustrations a trace of human existence. Only Rossi's portrait appears on the first page and on the last, where he is presented in full stature.

Almost all buildings in this book could be subscribed to the Cemetery of San Cataldo (1971) in Modena, Italy, as a 'trademark' of Rossi's architecture. The same critical notion could be applied to Giorgio Grassi's College library in Valencia, described in 'Outrage' (AR February, p27). Here Grassi and Rossi shake hands: the prison-like sadness in company of abusive, offensive surroundings. Despite all this, I am sure the Italian architects, copious of glory in modern architecture, will give us in this new century buildings and their environments full of joy and elegance.

Yours etc

ADAM MILCZYNSKI KAAS

Pamplona, Spain

MORAL POINT

SIR: Regarding your item on 'Postmodern Urbanity' in the February number of your excellent magazine (p34), I wish to take exception to your contention that post-modern urbanism rejects morality. I must believe that you are unfamiliar with many of the profoundly moral positions proposed by post-modern urbanism, particularly in the form of the New Urbanism. Here are a few illustrations:

Community as inclusive of all ages, incomes

and family types: the localized variety of housing types characteristic of good New Urban plans speaks to human diversity and harmony rather than stratification and segregation.

The re-establishment of the public realm: the postwar American suburb provides little spatial focus or forum for protected public association. The first amendment to the US constitution protecting free speech does not apply in private shopping malls. New Urban communities provide designed public realms whose purpose is to re-energize public discourse.

Settlement as an act of environmental stewardship: sprawl is increasingly seen to be the primary degradation of American life. New Urbanist communities are compact, enhancing the public realm and defining the private realm to heighten the character of each, while clearly defining edges and open space for protection.

The concept of family life in which all members have freedom of association and mobility: in automobile focused postwar suburbs, older citizens lose their liberty with their driving privileges and the young are captives of carpools until they earn their licences. New Urbanist communities provide pedestrian, transit serviceable environments where the car is much less necessary.

The applicability of principles to new and existing communities: the success of the Federal HOPE VI program shows that New Urbanist principles are as appropriate to restoring older communities as they are to designing new ones.

Certainly New Urbanist communities take the forms of marketable architectures. These superficial stylistic features should not, however, obscure the fundamentally revolutionary form of New Urbanist communities and the high principles they embody. Please look again.

Yours etc

RALPH BENNETT

Maryland, USA

postscript

ar+d GEARS UP

Entries are already arriving for this year's ar+d Award for Emerging Architecture, to be given for built work of any description by architects under 45. The jury includes Will Bruder, Odile Decq, Christoph Ingenhoven, Adalberto Dias, Erick van Egeraat and Peter Davey. Further details: www.arplusd.com

ADDENDA

The photographs of the Pompidou Centre featured in AR March 2000, p22, were by Paul Raftery. Further details: www.rafpphoto.com
The exhibition review 'The German Century', AR May 2000, p27, was by Layla Dawson.

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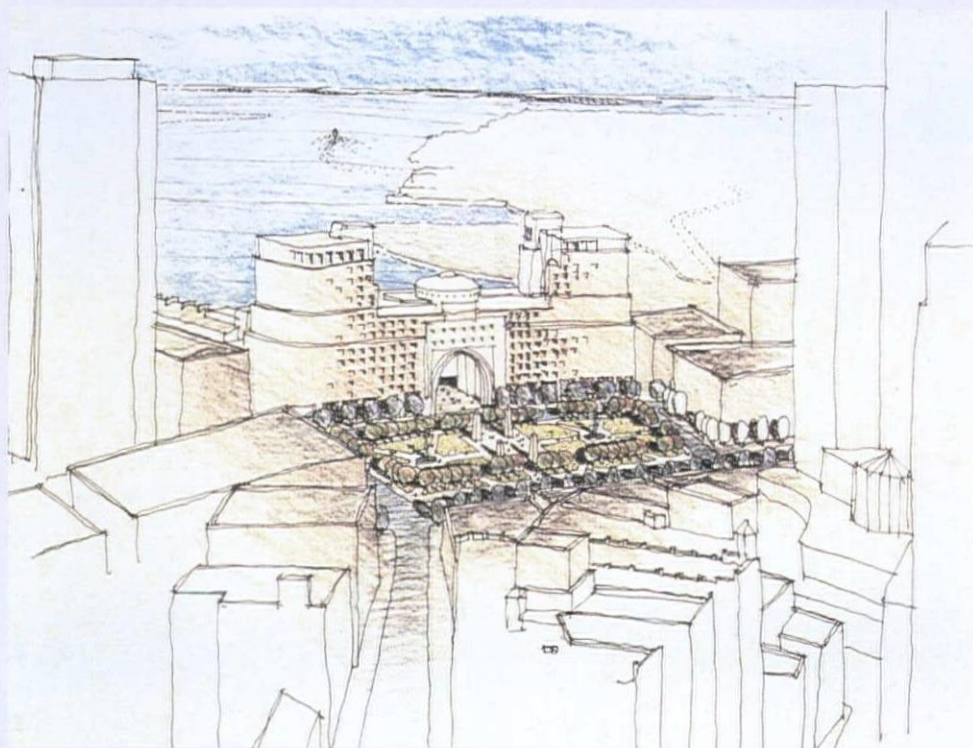


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Proposal for Boston's Central Artery, by Chan Krieger & Associates, now on hold because of lack of funding.

Letter from Boston

Boston has a fine nineteenth-century and Modernist past, but sadly contemporary developments do not reflect this rich architectural and urban legacy.

In the last decade, Boston has become a major global financial center, smaller in size to only New York, London and Tokyo, but it would be a stretch at best to name an important architectural creation that has received much worldwide acclaim. Ironically this state of affairs exists in a city that even when it was suffering economic decline was home to outstanding architecture. At Copley Square alone Boston has three buildings – the Boston Public Library by McKim, Mead and White, Trinity Church by H. H. Richardson and the Hancock Tower by Harry Cobb of Pei, Cobb & Freed – that in their day were among the best known and most important examples of American architecture.

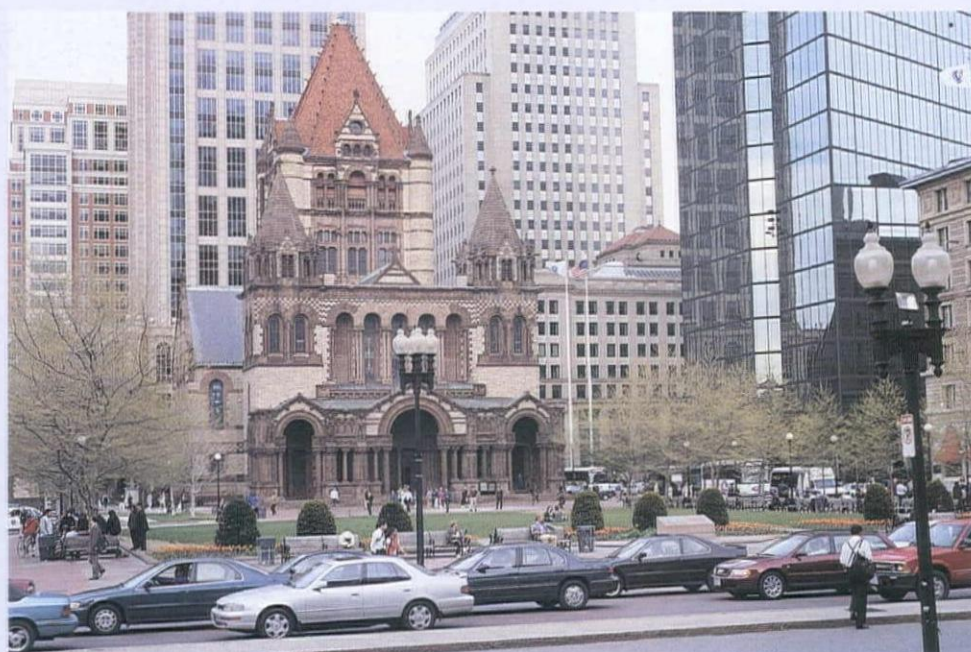
Where once Boston revelled in standing out architecturally, it seems now to want to fit in. And, in Boston, 'fitting in' means what my colleague Richard Marshall calls the 'aesthetic of the acceptable, the safe and the known', which in Boston usually means red brick referencing Boston's nineteenth-century architecture and rejecting the unapologetically modern or different. It is a city whose builders (architects and developers) with all their considerable talent and imagination seem unable to provide the adventuresome, the new or the distinctive in their architecture. Even as Boston expands its global reach and

becomes like everywhere else and home to name brand stores, up-scale in city malls, boutique restaurants and a rapidly gentrifying center causing a major housing crisis for the working and middle classes, its conservatism does keep it unique. Where in other cities new developments like Niketown add architectural glitz, in Boston it is just another reddish building trying desperately to fit into its surrounding context. New high-tech firms while creating cutting-edge technologies opt to build the most banal and conservative of buildings. Take for

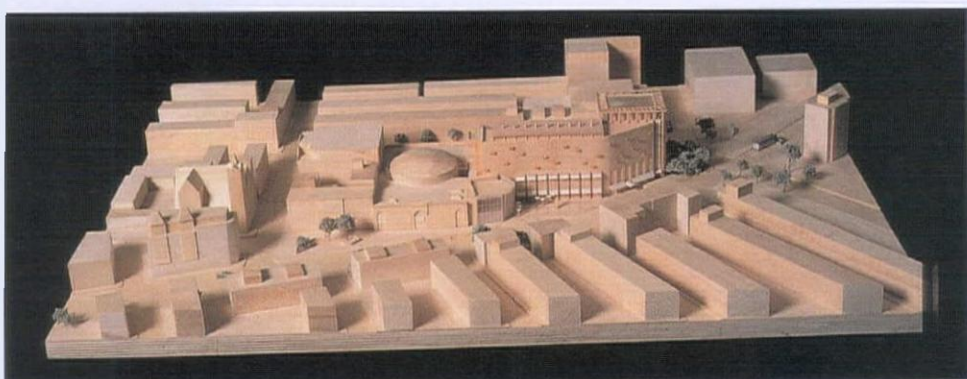
example Genzyme, a new biotechnology firm, which has built as its new headquarters a mock red brick nineteenth-century warehouse masquerading as a cathedral. I am not by nature in favor of glitz and certainly a sense of context that keeps Boston unique is salutary, but when you live in Boston long enough you begin to ask why does contextual have to be so boring – even architecturally oppressive?

Why Boston today is so suspicious of the modern and the new is a mystery. Boston has a wonderful legacy of fine and successful buildings from the '60s when it was a center of Modernism and the new in America. The Carpenter Art Center by Le Corbusier (his only building in America), Aalto's MIT Dorm, Saarinen's Chapel and Kresge Auditorium, Ben Thompson's Design Research Building are all wonderfully urban and still well used and appreciated. Walter Gropius at the GSD educated a whole raft of important Modernists during this period. Add to that the somewhat later design for the Christian Science Center with its wonderfully urbane public space and I have always wondered why it is that Bostonians, architects among them, continue to harp on about buildings and designs they see as failures like the Boston City Hall. The winners certainly outpace the losers in this period. Bostonians still talk about the Hancock Tower's problems with falling glass while visitors to the city look at it with mouths agape.

Communities might be forgiven their suspicion of any urban design interventions. As architect Carol Burns has pointed out, the memory is still strong of the devastation caused by the West End Urban Renewal Project which levelled a perfectly viable neighborhood and



H. H. Richardson's magnificent Trinity Church in Copley Square. Photograph: David Ellis.



Model of Machado and Silvetti's development for the Boston Center for the Arts.

displaced over 30 000 people and replaced them with the most banal of modern buildings in a park. And so it should be. But it is not so clear to me that the political 'leadership' that might help Bostonians rethink their city as it enters the new millennium should so rarely lead but prefer instead to wait for the support of the community. Nor is it so clear that the local architectural community should be so unwilling to challenge Boston's conservatism.

In Boston, projects that would take a reasonably long time to develop elsewhere often appear to take forever to be realized. Long debates and community objections more often than not sap initial energy. Projects like the convention center, a complete waste of the city's resources in my view, amends the potentially interesting design proposal by Rafael Viñoly because of lack of funds. The (as of now \$13 billion, it continues to rise in cost) suppression of the Central Artery, a major highway through the center of the city that originally called for plans for creating a new and bold landscape for Boston, is also due to funding.



Banal contextualism - Niketown. Photograph: David Ellis.

That communities act as guardians of traditional spaces and places might be beneficial in a world in which change, no matter its consequences, is often the benchmark of the good. But it isn't so if just about any community group is allowed to act as a brake on most any design that does not fit into their conservative view of their self-interest. A recent imaginative design for the Boston Center for the Arts that will knit together what has been a blight on one of Boston's more energetic neighborhoods has been put on hold for about two years by a

'community' of a few house owners who feel that the service entrance will create too much traffic. Architecture and urban design is thus forced to respond not only to public confrontations but just about any public comment no matter how small or self-interested.

This may be changing. The Boston Redevelopment Authority, which for many years was as responsible as anyone in the city for demanding 'contextual' buildings is (according to some) beginning, if only tentatively, to shift its tone and to call for a more innovative and spirited architecture. Yet the local architectural community has been slow to respond.

If the local architectural community has not responded as yet, developers and educational and cultural institutions have begun a marked turn toward more signature buildings by engaging such architects as Maki, Gehry, Foster, Holl, Piano and Hollein to build. If we add to this the promise by the Pritzkers that their Fan Pier development will employ world-renowned architects, the turn of the century also may well be a turn of the architectural sensibility in Boston. What this might mean over the long term though is still too early to tell. Will it signal a substantial shift and new excitement for architecture in Boston, or will it merely result in a few more architectural bumps on Boston's beleaguered cityscape?

And will such buildings really help energize the city's architecture or will it simply make Boston another anywhere seeking to find its place through signature buildings with no sense of the local? Even those of us who look to the new, having been in Boston so long, do so with wonder but also suspicion.

EDWARD ROBBINS

july

Houses tell us more about their makers, owners and users than any other building type. They offer opportunities for experiment in life, construction and art. At their best, they can inspire ideas for buildings of all kinds and sizes in the imaginations of every architect. At their most intense, they can suggest new ideas of relationships of humankind to nature, artefact to place, technology to the biosphere. In July, the AR looks at some of the most inventive new houses round the world. Tadao Ando has transported his talent and techniques to make an extraordinary villa in Chicago. At the other end of the scale, Georges Maurios has inserted a little house in a Parisian terrace: a model of economic infill. Richard Neutra's fabulous Kaufmann House in Los Angeles, which was one of the inspirations

of West Coast Modernism has been beautifully refurbished by Marmol & Radziner, while Kerry Hill has drawn on Equatorial Chinese tradition to make a new interpretation of living in the humid tropics. Miguel Angel Roca's little weekend house near Córdoba in Argentina is a model of how to touch the ground lightly; Ivan Kroupa's studio in Prague has a sensitive distillation of the essence of urban living.

All these, and more, in the July issue, as well as the outstanding results of the recent Commonwealth Association of Architects' student competition for an ecologically aware travellers' rest, and interiors from London's National Portrait Gallery and the Centre Pompidou in Paris. Buy this and 11 other issues of the AR conveniently and at a discount by using the subscription form or through our website at

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Manchester united

A new footbridge in an anodyne area of central Manchester forms a landmark as well as an urban link.

Facing each other across a Manchester street are two of the flagships of the booming British retail economy: Marks & Spencer, the great clothes and food emporium, and the Arndale Centre (a sort of shopping mall, modelled on the American type, but not as flash). Instead of firing broadsides at each other across the street (which was devastated by an IRA bomb in 1996), the two have decided to link with a sort of gang plank so that shoppers can pass seamlessly from one to the other without having to dodge traffic or face the weather.

The two new buildings are not particularly noteworthy, but the bridge in its tube is a remarkable structure, and a

memorable landmark in the city. Designed by Hodder Associates with Ove Arup & Partners, a tube slopes slightly downwards from Arndale to M&S. Tapering towards the middle of the span, the structure is an elegant triangulated steel basket, formed in hyperbolic paraboloid geometry out of 110mm tubes welded together and linked in lattice by tie rods and four circular structural hoops.

The twisted geometry stiffens the tube and allows individual members of the curved structure to be straight, just as the triangular glass panes suspended within the basket are plane, and so easily joined with flexible silicone pointing. The ends of the structure

are contained within compression rings.

A timber deck is supported on I beams which transfer its loads to the hoops. Its gentle ramps are relieved by two horizontal landings. Glass balustrades support stainless steel handrails and slatted panels extend into the gap between deck and cladding. (It remains to be seen how this detail will stand up to the tender mercies of the British public, notoriously the filthiest and most litter-prone in Europe, but the extended deck will at least allow the inside of the glass to be cleaned easily.) The bridge is ventilated naturally, and lighting and heating is carried under the deck.

1,2 Hodder Associates and Ove Arup & Partners won the competition for the bridge which slopes down from Arndale to Marks & Spencer: a memorable delicate moment between two anonymous buildings.

3,4 Constriction of faceted skin in mid span emphasizes sense of progress along gently sloping timber ramp.

Architect

Hodder Associates, London and Manchester

Design team

Stephen Hodder, Peter Williams, Stewart Jones, Helen Roberts

Structural engineer

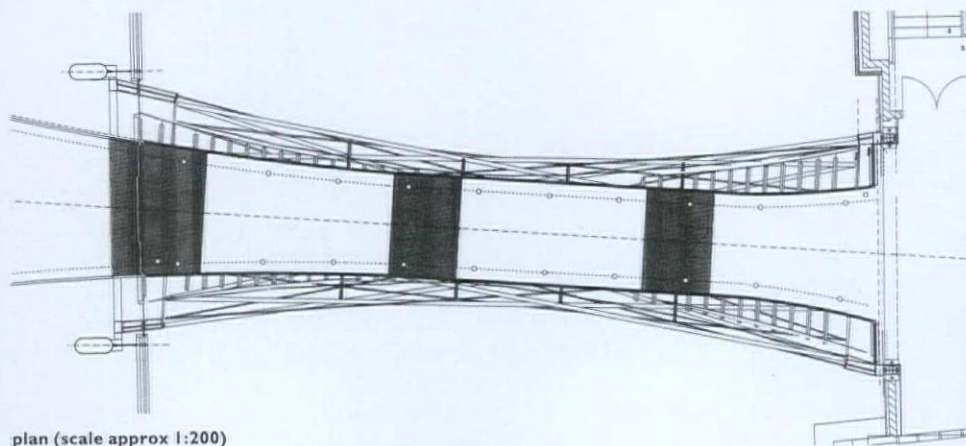
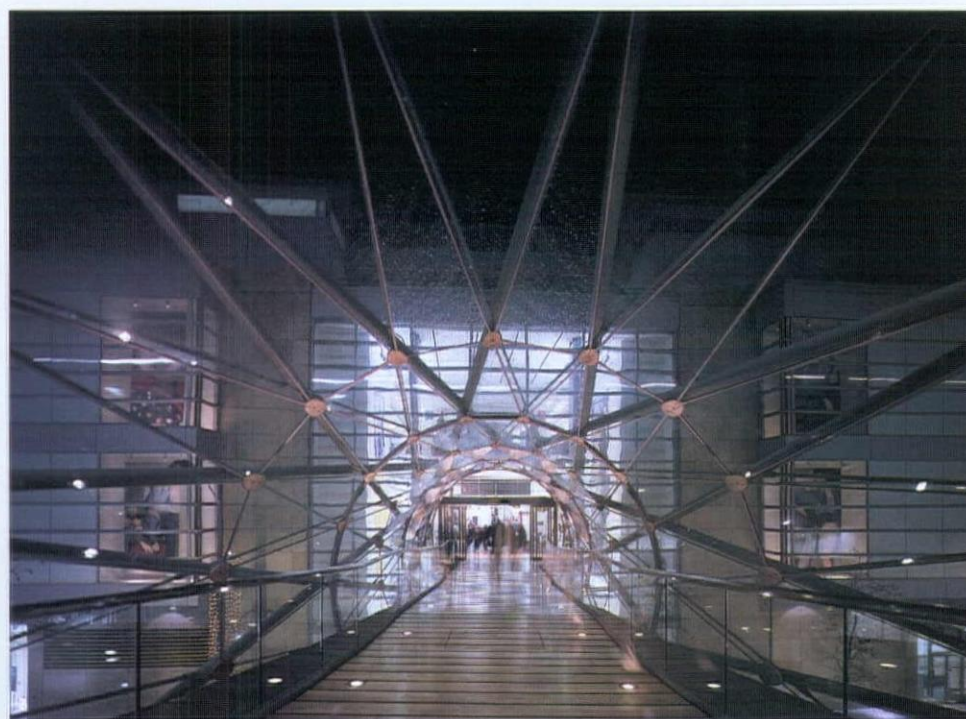
Ove Arup & Partners

Glazing

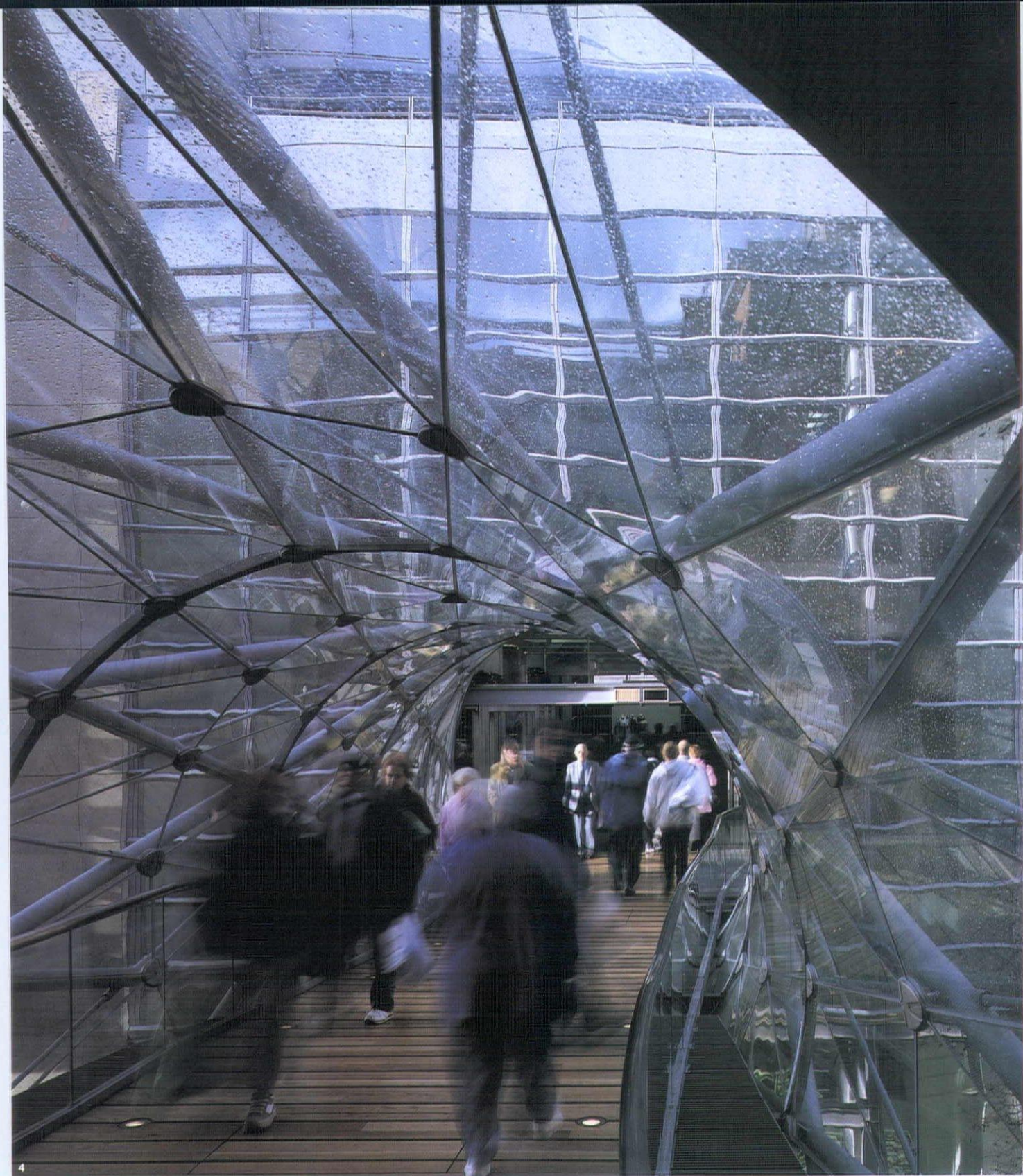
Ove Arup Facades

Photographs

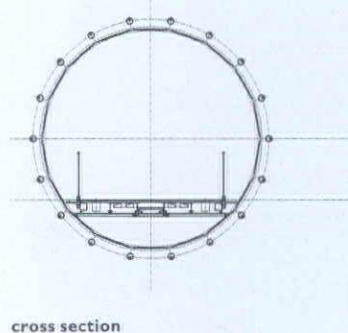
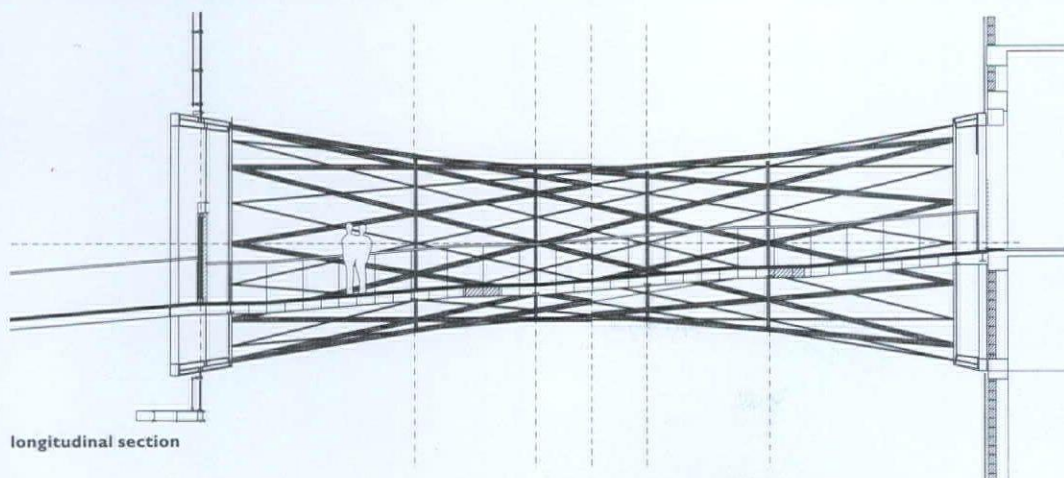
1,2 Ove Arup & Partners; 3, 4, Peter Cook



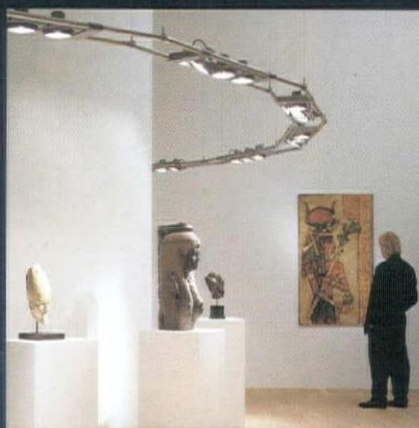
plan (scale approx 1:200)



4



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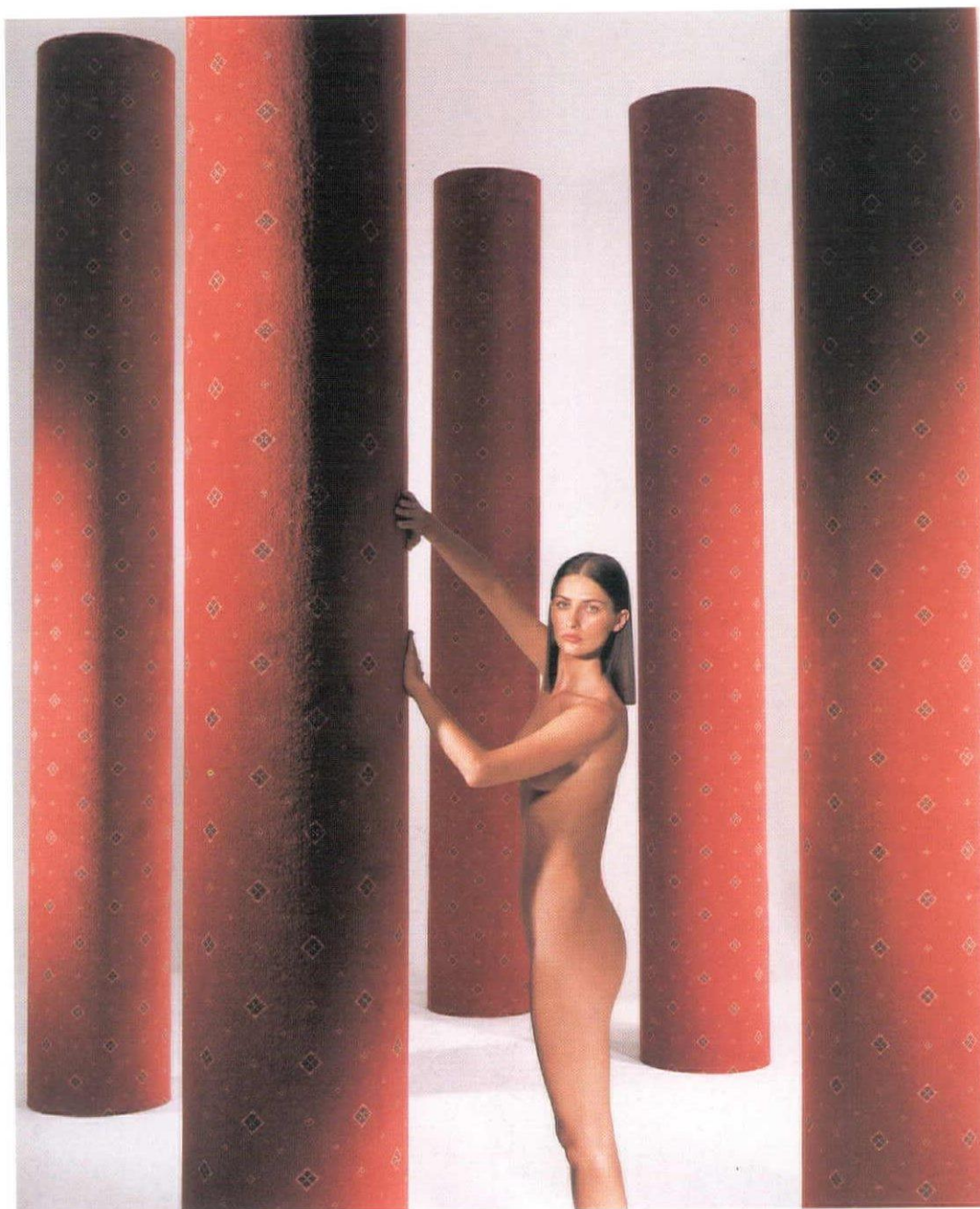
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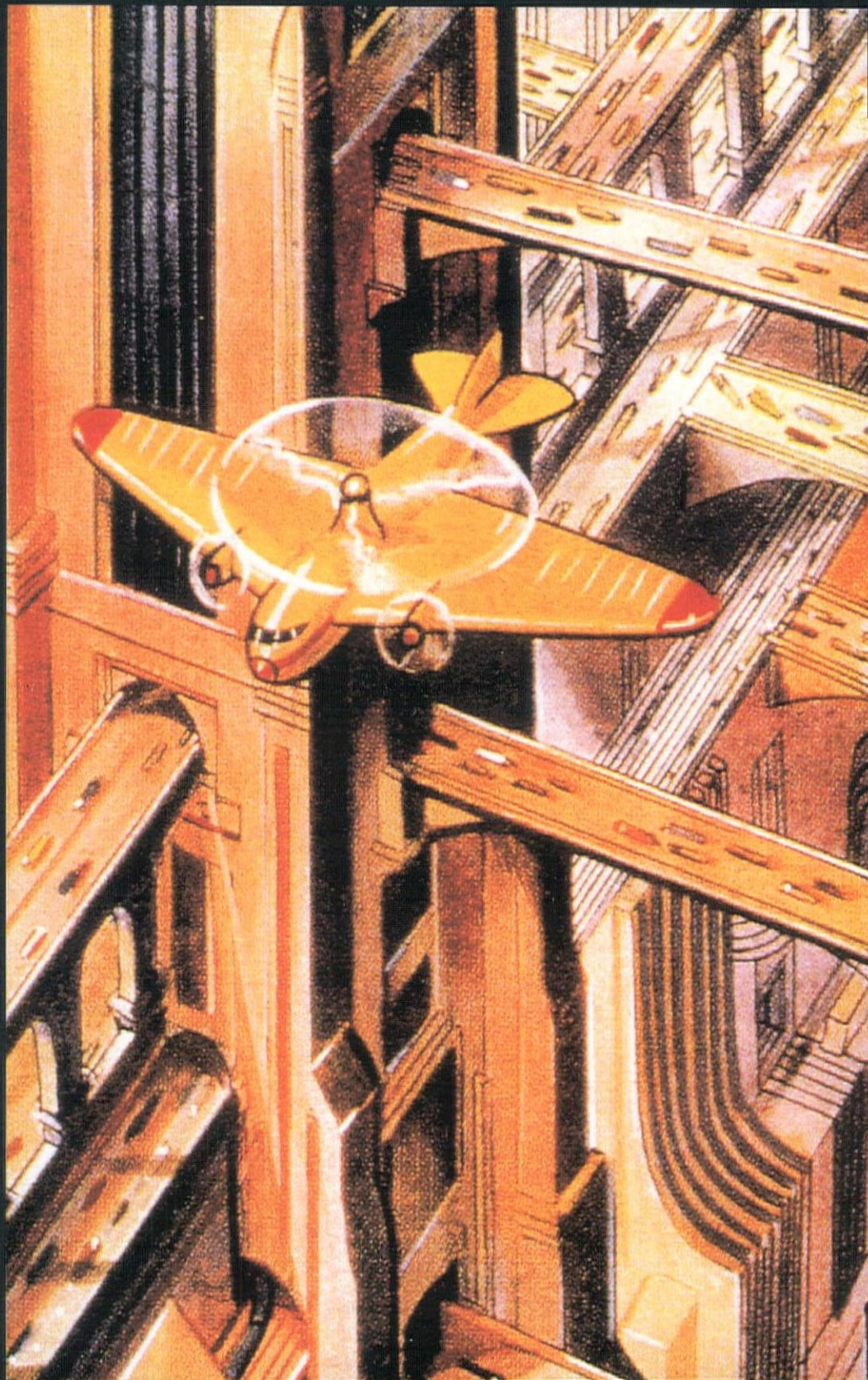
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THE STATION NOT

A renaissance in rail travel promises to enhance the structure and life of the city, making yesterday's predictions that we should model the urban fabric on the airport look increasingly ridiculous and perversely anti-human.



Detail of *Cities of Tomorrow* by Julian Krupa, 1939: a yesterday's tomorrow, denser than Koolhaas's anodyne future but just as scatty. (Taken from Upton, Dell, *Architecture in the United States*, Oxford University Press, 1998.)

THE AIRPORT

In that ponderous, over-designed and environmentally destructive book, *S, M, L, XL*, Rem Koolhaas talks about the Generic City, which is 'liberated from the captivity of center, from the straitjacket of identity ... it is nothing but a reflection of present need and present ability. It is the city without history. It is big enough for everybody. It is easy, it does not need maintenance. If it gets too small it just expands. If it gets old it just self-destructs and renews. It is equally exciting – or unexciting – everywhere. It is "superficial" – like a Hollywood studio lot, it can produce a new identity every Monday morning'.¹

Koolhaas's insouciant vision is rather cheering at first sight: it could be great fun (if rather unsettling) if the city was capable of changing its appearance and atmosphere overnight. Apart from anything else, flash architects like Koolhaas would get lots of work (no wonder that his tome has been so very popular with students).

But the Generic City is far from being as amusing, responsive, self-regenerating or cheap as Koolhaas says. As everyone knows, the horrendous slums of the apparently booming cities of the US and some parts of Asia, those of the decayed industrial areas of Europe, are not going to look different next Monday morning. The global economy may be responsible for the Generic City (as indeed it is for Rem Koolhaas). But the new economy has not got the political organization, nor the will, nor the monetary resources to transform these places overnight (if at all). Koolhaas might argue that this doesn't matter because 'the Generic City is *sedated* ... This pervasive lack of urgency and insistence acts like a potent drug; it induces a *hallucination of the normal*'.² Perhaps the poor can find just enough to dull the dreadfulness by using drugs, drinking or drooling over the electronic media. Equally, the culture of the Generic City and the global economy is indifferent to the future of the planet. While cities do not regenerate with the spontaneity that Koolhaas suggests, they certainly spread, and as they do, they consume ever more natural resources. The process cannot go on at either a human or environmental level.

The huge and humanly destructive drain on resources implied by the global economy has been attacked by Vandana Shiva as a 'war against nature and the poor', and a mechanism for 'stealing livelihoods from the poor to feed the powerful' (notably the shareholders of global corporations).³ Of course, architects, designers and planners cannot alter the world economic system. But they can help to mitigate its effects by example, and hope to change the climate of opinion which allows the unrestrained rule of the markets. More importantly, the uncorrected progress of the present dominant system will lead to collapse of the ecology as we know it. (Gaia will always adapt, and if human beings do not try to understand, they will simply be shrugged off as an irrelevant species, suitable only for slow and probably very painful extinction.)

Nowhere is thought more desperately needed than in transport. Koolhaas, and many another, has drawn strong parallels between the amorphousness and lack of place in the modern city and the modern airport. 'Is the contemporary city – like the contemporary airport "all the same"? Is it possible to theorise this convergence? And if so, to what ultimate convergence is it aspiring ... what if we

are witnessing a global liberalization movement "down with character"! What is left after identity is stripped? The Generic?'⁴

While Koolhaas celebrates such tendencies with tenderness, bizarre syntax and almost masturbatory glee, any sensible person realizes that the exemplar of modern cities must be the railway station rather than the airport and the car park. We must stop devouring the earth's surface with such avidity; we must encourage means of travelling which are not so energy expensive as the aeroplane; we have to integrate transport and the city so that densities can be increased, land-take reduced, and natural resources conserved.

Nowadays, national travel in the most advanced countries like Germany, France and Scandinavia is often more convenient and quick by rail rather than air. A huge investment in infrastructure has been necessary, but results are clear in terms of both GDP per person and the quality of cities and countryside.

Not only do railways help to produce decent environments, conserve resources and energy but their stations can be important elements of the city. There is a welcome renaissance in railway architecture. Even in the US, the country which is supposed to be least fond of rail travel, there are dramatic developments intended to return the station to its key role in the public realm: Grand Central in New York has been restored to its former glory (AR May 1999) and is now an extraordinarily busy and lively place, clean, luminous and sparkling. Plans for Penn station in the same city promise equally well (AR September 1999). In Europe, there is scarcely any great city which has not renewed or rebuilt its main stations. Many cities have also invested in new metro systems, ranging from the rail track for Hanover's Expo this summer (AR December 1999) to the extension to the Jubilee Line in London (p46). The latter promises to make great differences to the economic and public life of south and south-east London, areas curiously previously distant from the rest of the capital, mentally if not physically. It also promises to help rejuvenate the urban fabric. Roland Paoletti, chief architect to London Transport, has, with an inspired series of choices, appointed architects who have created a remarkable series of places which add to existing good areas and could form foci for renewal of run-down ones.

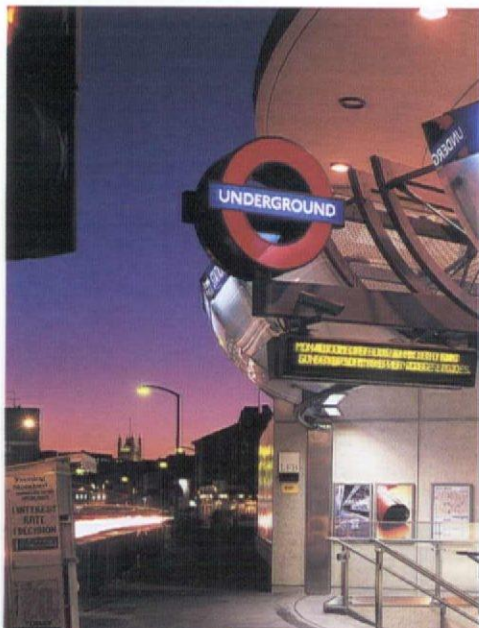
All this is very far from Koolhaas's Generic City with its decentred nature and instant changes of costume. Centres seem to be strengthening, not falling apart, and good public transport is one of the main agents in this consolidation. Nowadays, most people both fly and drive, but just as very few of us would regard the multi-storey car park as a paradigm for urban architecture, it seems ridiculous to choose airports as patterns for urban growth – and rather old fashioned too, the Koolhaas book is five years old now, and seems so. Its crude and would-be trendy prescriptions have the flavour of yesterday's future at a time when society, architecture and planning are becoming more and more aware of human and ecological priorities.

1 Koolhaas, Rem and Bruce Mau, *S, M, L, XL*, Montacelli Press, New York, 1995, pp1249-1250.

2 *Idem*.

3, 4 Shiva, Vandana, *Reith Lecture* delivered from New Delhi on BBC Radio 4, 10 May 2000.

5 *Op cit*, p1248.



**UNDERGROUND STATION,
SOUTHWARK, LONDON**
ARCHITECT
MACCORMAC JAMIESON PRICHARD

1
Corner entrance at the Cut. Generous steel and translucent glass canopy welcomes you into underground. Upper concrete canopy is start of as yet unbuilt superstructure.

2
Waterloo East entrance: bulging metal and glass wall reflects on Victorian technology of main station.

3,4
Entrance hall (Cut side): homage to Soane, Pick and Holden.

5
The splendid intermediate level. Fritted glass wall by Alexander Beleschenko describes part of an oval cone which reflects abundant sun and daylight from roof. Varying width of blue lines alters transparency from top to bottom.

A CUT ABOVE

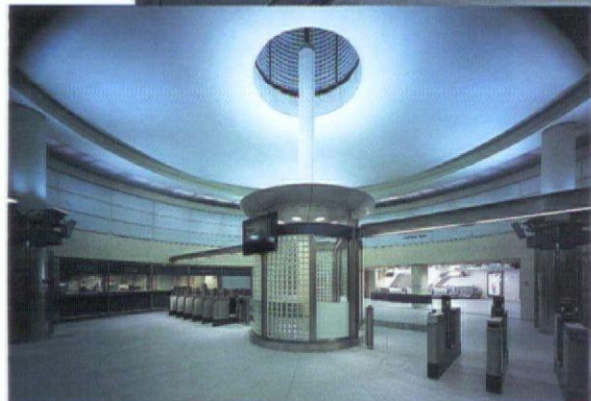
At a singularly forlorn corner in central south London, a new surprising urban space has been created, suffused with sunlight but deep underground.



2



3



4

London, the first modern city, was made by its railways. Awesome expansion in the nineteenth century, which often shocked foreign visitors, was enabled by the seemingly endless extensions of the steel tracks. Since the middle of the twentieth century, the network of metropolitan railways has not been greatly extended, partly because the system was supposed to be adequate, and partly because the dark night of Thatcherism prevented investment in public structures.

Now, a most important thread has been added to the net. The Jubilee Line has been extended to link the north and south of the city across the Thames – and the east of the city which, having been partly destroyed by bombs when it was the biggest port in the world, and then the rapid de-industrialization of the British economy, has now started to have much more life, with new parks, new foundations, new structure which may all perhaps make the great city find new life and energy from the east.

Just as London grew in size with its railways, it grew in presence by their stations. The great terminals: King's Cross, Paddington, St Pancras, were essential landmarks and meeting places of the Victorian city. In the 1930s, Frank Pick and his architect Charles Holden gave the stations of the expanding underground rail system almost equal presence.

The new stations on the extension to the Jubilee Line are intended by its chief architect Roland Paoletti (the Medici of London Transport), to have the same kind of distinction, and, on the whole, his plan has worked triumphantly,* with new key moments inserted into some quite unexpected parts of the ancient city. Paoletti did this by the careful selection of architects whom he knew he could trust to make places, but who did not



← Jubilee line

← Jubilee line

UNDERGROUND STATION, SOUTHWARK, LONDON

ARCHITECT

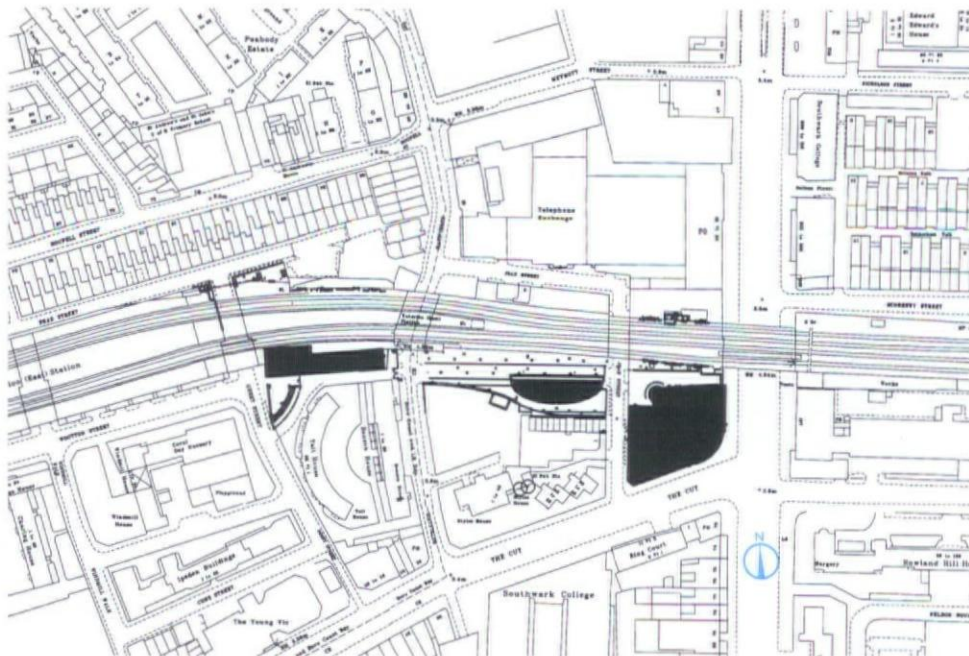
MACCORMAC JAMIESON PRICHARD

necessarily have a record of working for public transport.

MacCormac Jamieson & Prichard were one of the most surprising choices. Their new buildings for universities are unsurpassed,* and have established their reputation as masters of materials, craftsmanship and tender placemaking. Southwark station shows similar sensitivity but on a much greater and more populist scale.

The task was complicated. At one of the scrubbiest junctions in south London, where The Cut meets Blackfriars Road, a new building, 14 storeys of housing, will emerge. Another entrance is from Waterloo East Station, a stop on suburban routes to the south. Both entrances are distinguished.

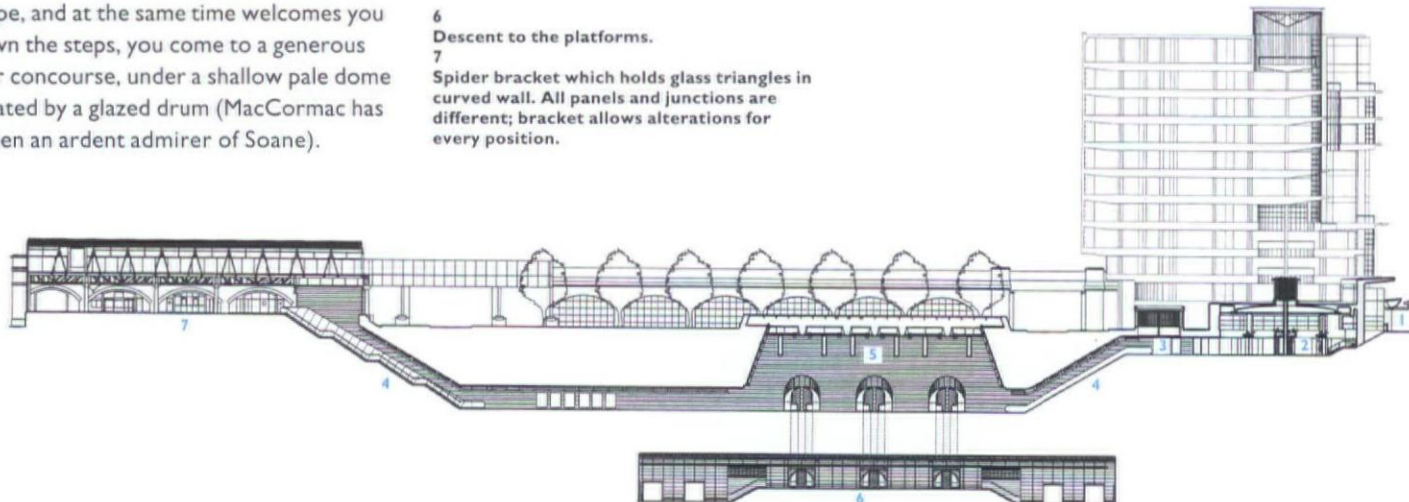
At the corner of The Cut, the architects have paid homage to Pick and Holden. They have created what they call a 'grand corner', the urban landmark which, in '30s fashion, makes a bold, rounded statement to the cityscape, and at the same time welcomes you in. Down the steps, you come to a generous circular concourse, under a shallow pale dome illuminated by a glazed drum (MacCormac has long been an ardent admirer of Soane).



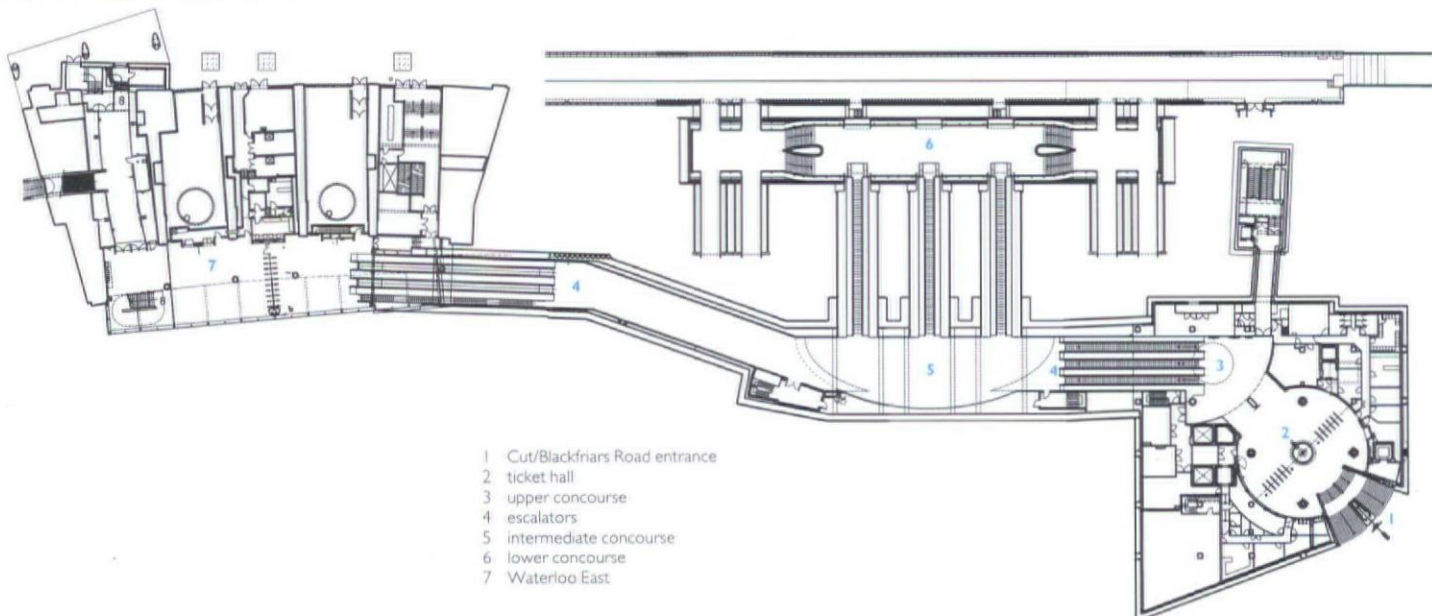
site plan

6
Descent to the platforms.

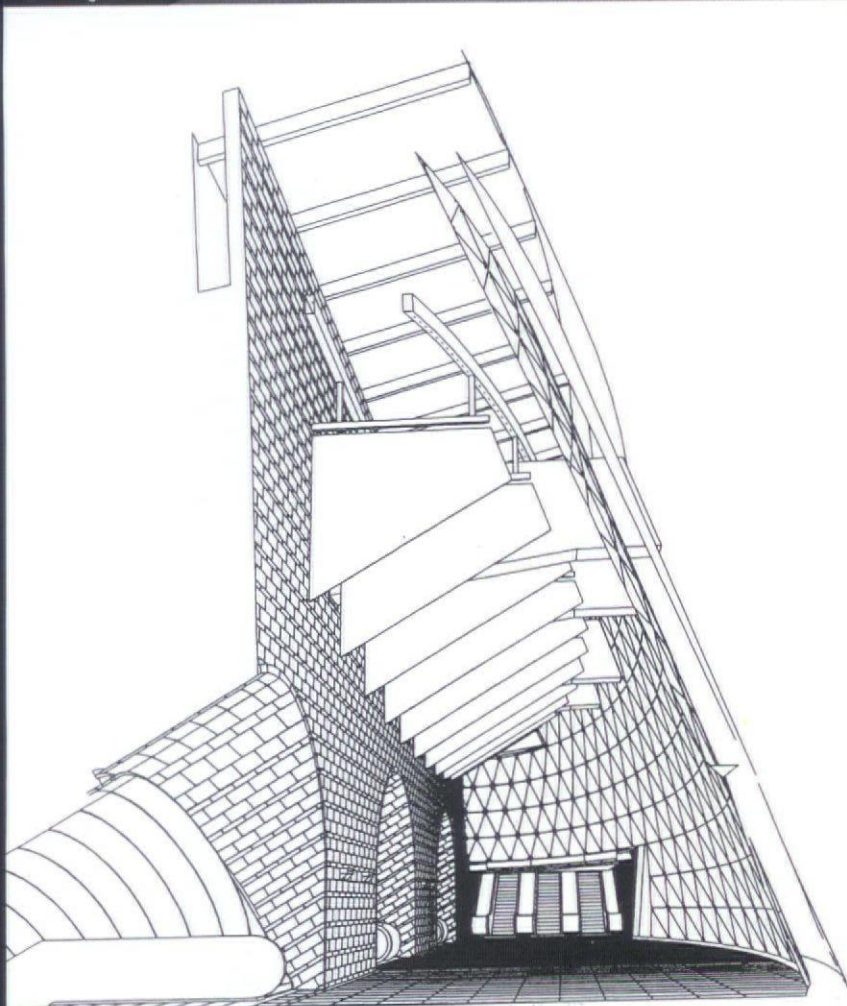
7
Spider bracket which holds glass triangles in curved wall. All panels and junctions are different; bracket allows alterations for every position.



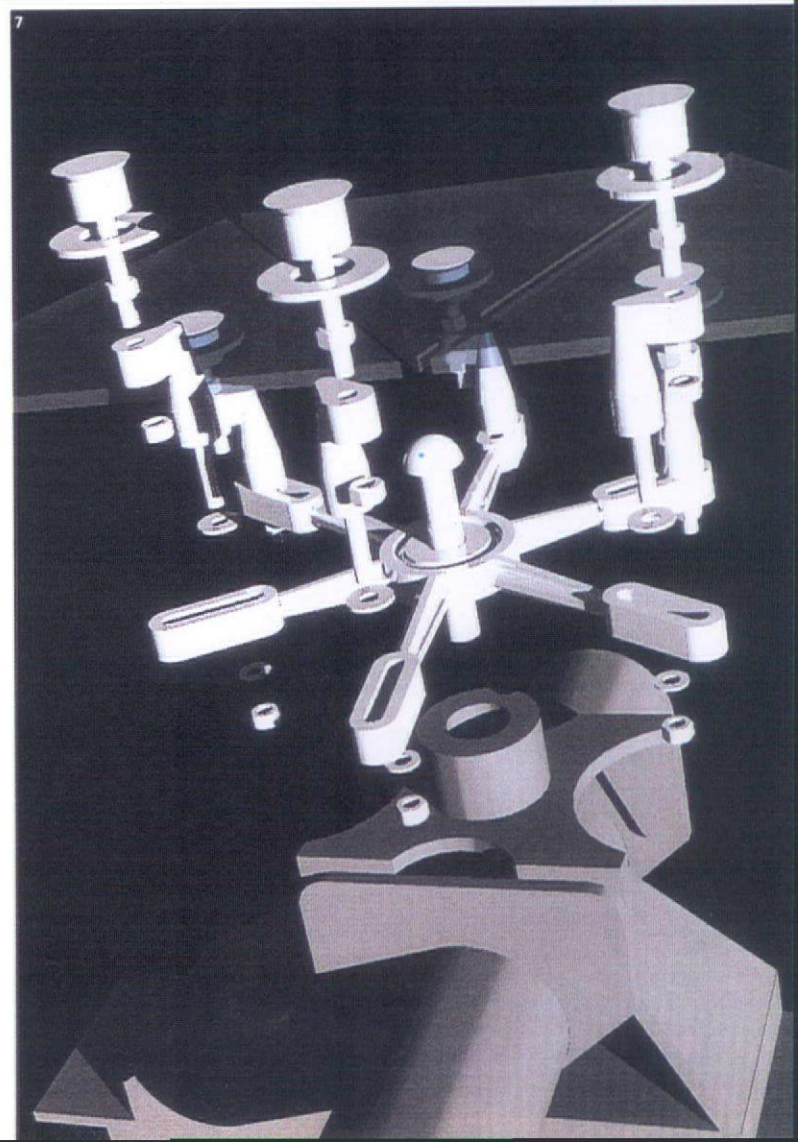
section from Waterloo East to The Cut



- 1 Cut/Blackfriars Road entrance
- 2 ticket hall
- 3 upper concourse
- 4 escalators
- 5 intermediate concourse
- 6 lower concourse
- 7 Waterloo East



sectional perspective of intermediate concourse



**UNDERGROUND STATION,
SOUTHWARK, LONDON**

ARCHITECT

MACCORMAC JAMIESON PRICHARD

Architects

MacCormac Jamieson Prichard, London

Design team

John Attwood, David Bonta, Alice Brown, Helen Brunskill, Stephen Coomber, Matthew Dean, Dil Green, Peter Hull, Peter Jamieson, Martin Kehoe, Peter Liddell, Ian Logan, Richard MacCormac, Freddy McBride, Chris McCarthy, Duncan McKinnon, Claire Mellor, Phillip Naylor, Chris Schulte, Chris Scott, Morag Tait, Eddie Taylor, Christian Uhl, Simon Whiting

Support staff

Fiona Henderson, Sue Barnes, Rosie Kerrison, Pam Trim, Helen Tsoi, Susanna Woodgate

Civil engineer

Babbie

Structural engineers

Aspen Group; Mouchels; Adams Kara Taylor (cone wall); YRM Anthony Hunt (cone wall)

Artist and glazing consultant (cone wall)

Alexander Beleschenko

Photography

Peter Durant/arcblue.com 3, 4, 5, 6, 8
and Dennis Gilbert/VIEW 1, 2

8

Coming up to the intermediate concourse from trains.

At the other end of the complex, a glass and steel structure gently reflects on the rather dowdy East Waterloo station with a canopy that complements the existing building and beckons you down into the underground. Organizing the complex must have been very difficult, with many complications caused by the nineteenth-century tracks, and numerous bits of underground urban infrastructure causing a somewhat disjointed plan.

MacCormac realized that the place had to be given a focus, somewhere which unites the two sides and is memorable even in the hurry of subterranean journeys. His masterstroke is the intermediate concourse, which (down escalators) links the two entrance halls. By a fluke of city morphology, this is able to receive light from the sky and is awash with blue light.

One side of the big space is in effect a three-dimensional segment of an oval cone. Here, Alexander Beleschenko, the glass artist, has created a wall of triangular panes of blue enamelled glass, almost pin-striped in pattern; it reflects skylight and, at night, the electric illumination to wash the whole place with cobalt. Opposite the blue curve is a much plainer and more sober plane wall, made of polished grey concrete blocks laid in what I think is called opus pseudisodorum, like ashlar with regular courses but different in height. Roman gravity is echoed in the simplicity of the openings which take you down to the stainless-steel lined passages that connect to the platforms at a further level underground. The whole effect is grand, urban in the best sense, even mysterious, in the reflected blue light.

The most powerful effect of the intermediate space is experienced as you come up from the platforms. The great blue wall becomes a triangulated sky. You come to The Cut with a sense of arrival (awesome if the place is not too busy) that it has never had before. Maybe the area will learn by example to be decent.



* The first completed stations on the Jubilee Line were shown in AR May 1999.

**For instance the chapel at Fitzwilliam College, Cambridge (AR April 1992) and the Ruskin library at Lancaster (AR June 1998).

***Beleschenko has worked with MacCormac before to great effect: for instance at St John's College Oxford, and at the Ruskin Library.

UNDERGROUND STATION,
CANARY WHARF, LONDON
ARCHITECT
FOSTER + PARTNERS

1-3
Entrance canopies admit light to
station cavity.
4
Escalators bathed in light under
Fosterito canopy.



1



2



3

GRAND CANARY

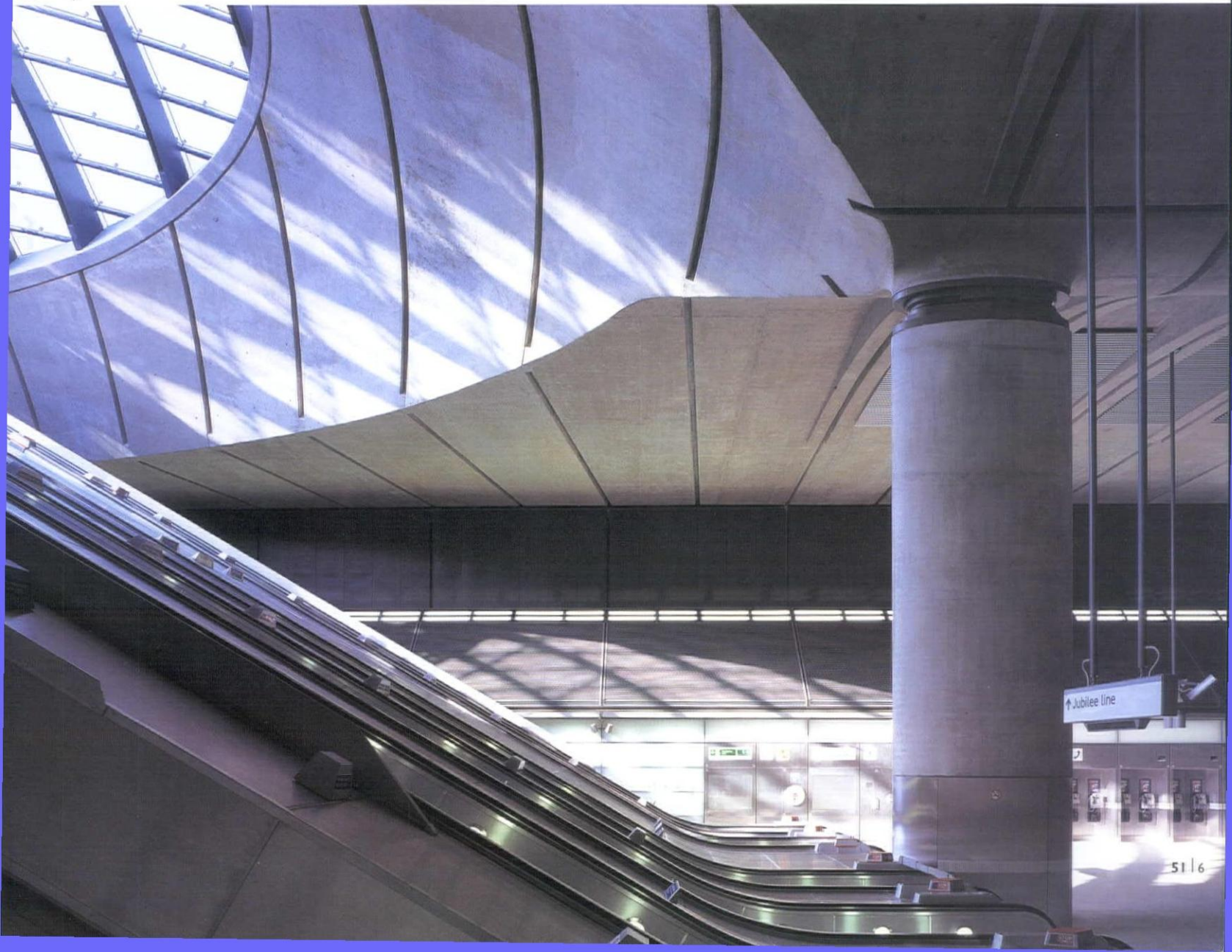
The pinnacle of London Underground's achievement in extending the Jubilee Line is the largest and grandest station serving a fast developing business centre at Canary Wharf.

Of all the millennial projects, the extension of the London Underground, under the direction of Roland Paoletti, is one of the most admirable.

After the squalor and chaos of most parts of the London tube, the new Jubilee Line is a haven of physical and visual order, and to disembark at Westminster, Southwark, Canary Wharf or North Greenwich is a positive pleasure. Paoletti, who appears to have been a strong client with a clear vision, has shown what can be done. (So far advertising is absent and it is interesting to find that you do not miss it. On the contrary, without distraction, you can appreciate the drama of space, raw textures and elemental form).

Canary Wharf by Foster and Partners is the grandest and the biggest of the new stations – measuring 313m in length, it is

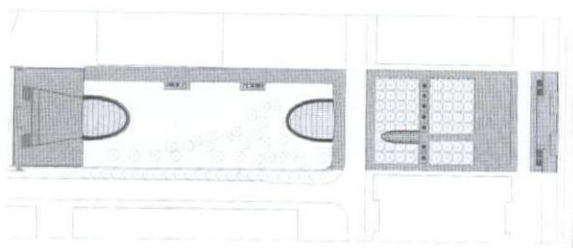
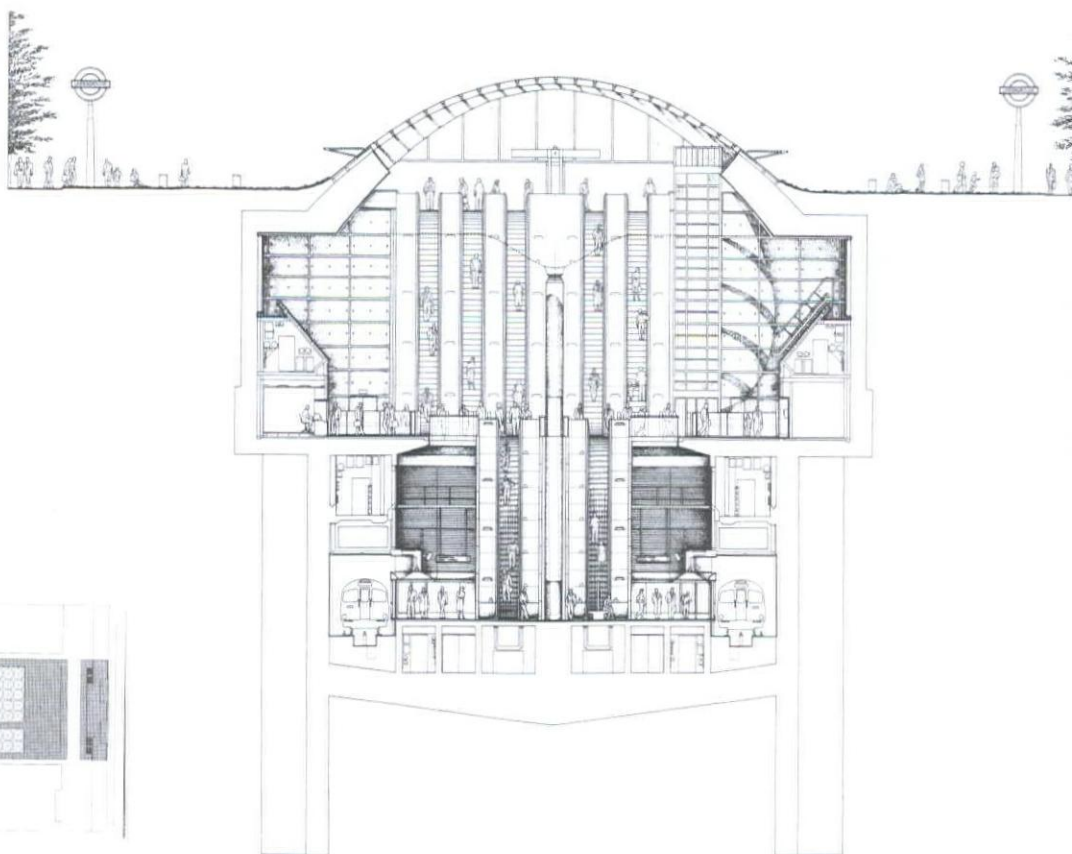
4



**UNDERGROUND STATION,
CANARY WHARF, LONDON**
ARCHITECT
FOSTER + PARTNERS

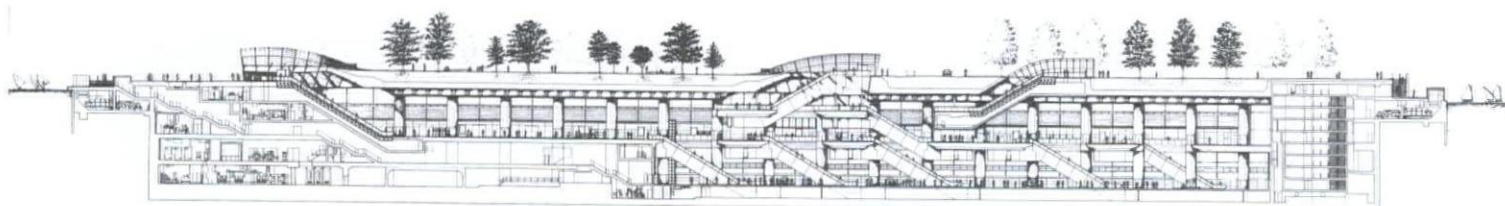
5 Ticket hall, lined by ticket machines, offices and shops, articulated by row of elliptical concrete columns and ceiling of arching ribs.

6 Ticket hall and escalator to platforms.

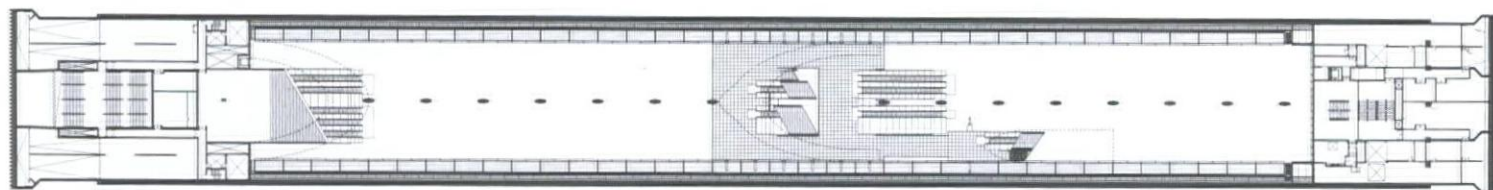


site plan

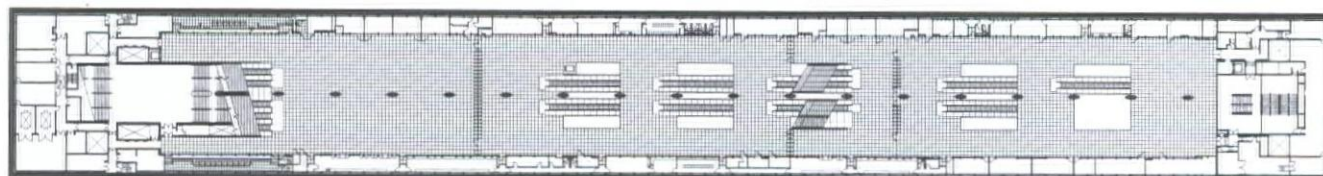
cross section



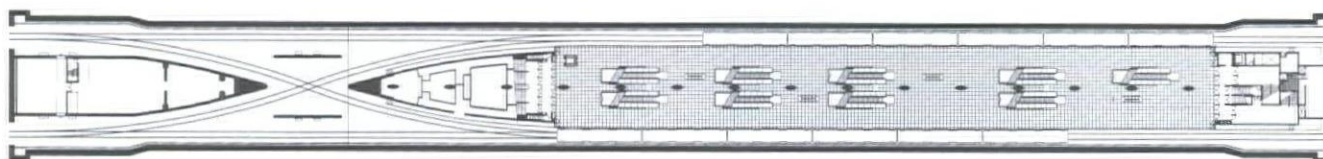
long section



mezzanine level plan



ticket hall level plan (scale approx 1:1780)



platform level plan



5



6

apparently as long as Canary Wharf Tower is high. Its scale and the capacity to handle up to 100 000 passengers at peak periods is in response to the growing importance of Canary Wharf as a business and commercial centre.

The station is entirely underground, built of concrete within the drained West India Dock by means of cut and cover construction. In this case, the cover is a new park, with entrances to the station indicated by three curved steel and glass canopies. Ellipsoidal on plan (the ellipse is the late twentieth-century shape) they are reminiscent of Fosteritos, the affectionately named entrances to the Bilbao metro. Here, as there, the structures prevent weather entering the station while admitting light deep into the station cavity.

Paoletti's guiding principles enshrined in the briefs for each station included the need for comprehensible public space, clearly defined passenger routes and abundant escalators. Given the expected volume of traffic at Canary Wharf, the problem of circulation was of importance in design of the station and Fosters have dealt with it brilliantly. Dramatic, functional and elegantly resolved, the building has been planned with clear hard logic so that passage at all times is straightforward and there is hardly need for directions.

A kind of futuristic excitement is attached to a journey through this station. Great banks of escalators, bathed in light, carry passengers

**UNDERGROUND STATION,
CANARY WHARF, LONDON**

ARCHITECT

FOSTER + PARTNERS

7

Platform level with glass screens and
escalators to ticket hall.

8

Elliptical columns rise from platform
level through ticket hall to roof.

7



down from the Fosteritos on the surface to the ticket hall. This cathedral-like volume is articulated by a central row of colossal elliptical columns that rise, from the platform level below, to the roof, to meet the rhythmic pattern of arching ribs. (They are crowned by elliptical bearings which allow the building to move in response to geological pressures.) Naturally lit and lined down its sides by ticket machines, offices and shops, the concourse is open through its length and breadth.

More banks of escalators take you down to the platforms in the bowels of the building, 27m below ground. Apart from scale, the excitement of this station consists in the tension between the sheer elegance of the structure and the rough vigour of raw concrete. At platform level, where concrete diaphragm walls cast into the ground have been left exposed, the robust engineering aesthetic is at its most pronounced. Use of stainless steel, aluminium and glass create polished counterpoints in the composition.

To prevent vandalism and damage, the bases of columns are clad in stainless steel. As on the other new stations, glass screens along the edge of platforms protect passengers from incoming and departing trains; and as well as looking good, glass lifts improve security and deter vandalism. P. M.

Architect

Foster and Partners, London

Project team

Norman Foster, David Nelson,
Gerard Evenden, Rodney Uren,
Richard Hawkins, Ross Palmer,
David Crosswaite, Armstrong Yakubu,
Chris Connell, Toby Blunt,
Charles Diamond, Glenis Fan, Lulie Fisher,
Mike Greville, Lee Hallman, Caroline Hislop,
Eddie Lamprey, Stuart Latham,
Muir Livingstone, Niall Monaghan,
James Risebero, Danny Shaw, Tim Shennan

Civil engineers

Posford Duvivier, De Leau Chadwick

Mechanical and electrical engineer

Jubilee Line Extension Project

**Structural engineers (architectural
fitout)**

Ove Arup & Partners

Lighting

Claude Engle

Photographs

Dennis Gilbert/View,
except nos: 1 by Nicholas Kane/Arcaid,
and 2, 3 by Nigel Young





BERMONDSEY BEACON

Bermondsey's new Underground station is a synthesis of heroic engineering structures animated by light, topped off by a sleek, transparent box at ground level.



Bermondsey lies just to the east of Tower Bridge on the south side of the Thames. Wharves and warehouses used to line its riverfront, but these are now long disused, some converted into fashionable apartments. Parts of the area have been fitfully regenerated, but it is still a rather dour and deprived London neighbourhood that can only benefit from the transport and economic impetus provided by the recently completed Jubilee Line Extension.

Bermondsey's new Underground station lies on Jamaica Road, a busy east-west artery that snakes along behind the riverfront. Designed by Ian Ritchie Architects, the station emerges from the ground in a gently curved translucent glass structure that rises up towards Jamaica Road. Glazed roof and walls transmit light into the ground floor concourse and down to the platforms below, mitigating the sense of dinginess and claustrophobia so often associated with London's existing tube stations. The glass roof is supported by steel liner beams wrapped to improve acoustic absorption and finished in perforated stainless-steel casings. The gleaming steel catches the sunlight, casting a play of sparkling reflections and shadows into the Stygian, subterranean depths.

Below ground, the station is an engineering hybrid, combining bored platform tunnels and a simple cut-and-cover box. The latter consists of concrete diaphragm walls braced by open horizontal



3

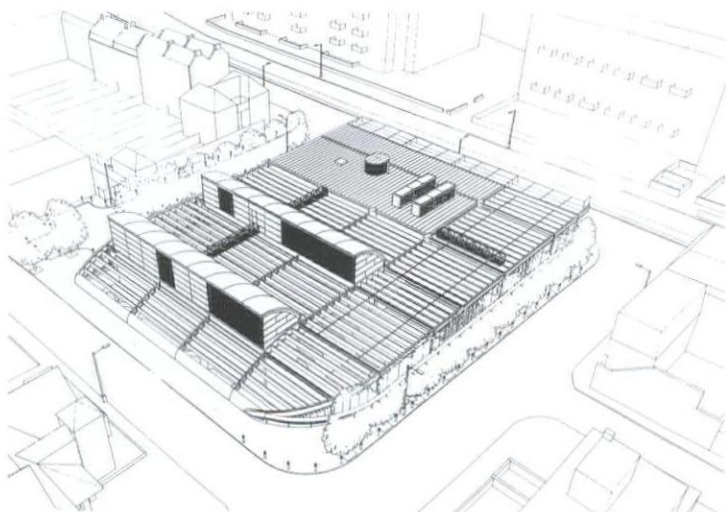
1
Enclosed by transparent walls and roof, the
luminous volume of the station concourse
has a clarity and legibility.

2
Station entrance; the building is a bold new
landmark in a part of London that greatly
needs civic gestures.

3
Open horizontal trusses allow light to
percolate down to the platforms below.

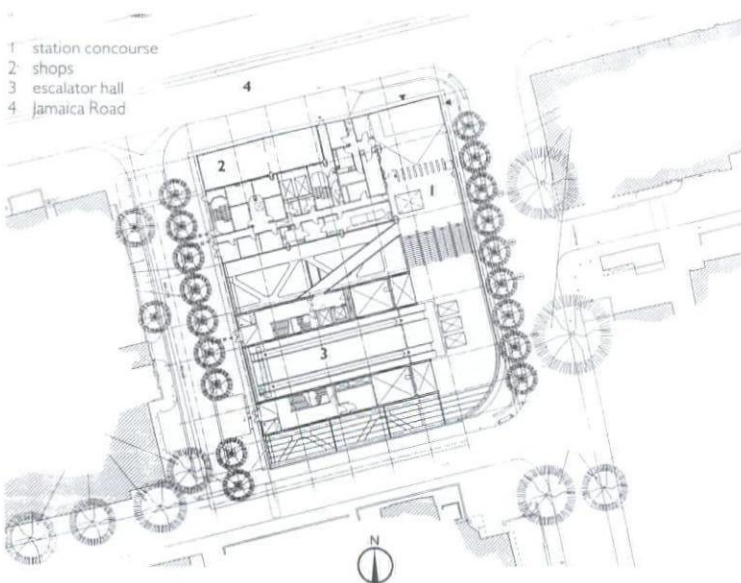
**UNDERGROUND STATION,
BERMONDSEY, LONDON**
ARCHITECT
IAN RITCHIE ARCHITECTS

**UNDERGROUND STATION,
BERMONDSEY, LONDON**
ARCHITECT
IAN RITCHIE ARCHITECTS

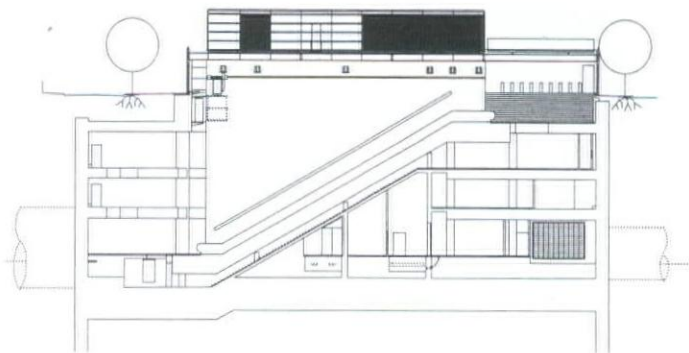


aerial perspective

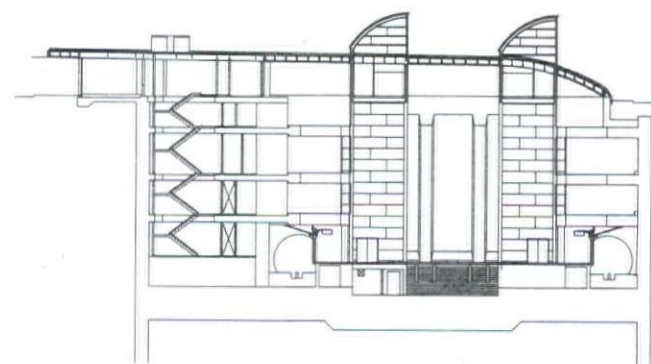
- 1 station concourse
- 2 shops
- 3 escalator hall
- 4 Jamaica Road



site plan (scale approx 1:1500)



longitudinal section



cross section



- 4 Platform level. Glass screens with sliding doors run along platform edge.
- 5 Escalator hall at platform level. Heroic mass of the station structure is animated by light.

trusses that allow light to percolate down to the lower levels. This arrangement astutely reconciles the depth of the platforms, surface restrictions and planning requirements. Ritchie's inventive integration of architecture and engineering is legibly manifest in a hierarchy of elements: the mass and surface irregularity of the diaphragm container, the sharp horizontal form of the concrete trusses and monolithic qualities of the vertical blade walls that enclose the escalator void. These echo the sleek, hard-edged functionalism of Pick and Holden's original iconic Underground stations. They also express the weight and mass of the station's structure, which is animated and enlivened through the presence of natural light.

Secondary finishes are reduced to a minimum, so that lower levels resemble bald, geological excavations into the earth. Above ground, the treatment of robust metal castings, stainless-steel plate and floor finishes is more refined, to achieve a visible tactile quality in areas of immediate public contact. Different aggregates are incorporated into the concrete to create a variety of textures; some warm grey, others pale and gently scintillating, with a high reflectance designed to transmit light. Enclosed by its ethereal glass envelope (the transparency makes circulation immediately comprehensible), the new station forms a bold civic landmark in a part of London that greatly needs such gestures. C.S.



Architect
Ian Ritchie Architects, London

Project team
Gordon Talbot, Phil Coffey, John Comparelli,
Simon Conolly, James de Soyres, Toby Edwards,
Christopher Hill, Mark Innes, Toke Kharmpelj,
Ian Montgomerie, Raita Nakajima, Henning Rambow,
Ian Ritchie, Paul Simovic, Anthony Summers

JLE architect
Gordon Swapp

Civil engineer
Sir William Halcrow and Partners

Structural engineer
Ove Arup & Partners

Quantity surveyor
Hanscomb Partnership

Lighting consultant
Lighting Design Vienna

Photographs
Dennis Gilbert/VIEW

UNDERNEATH THE POLITICS

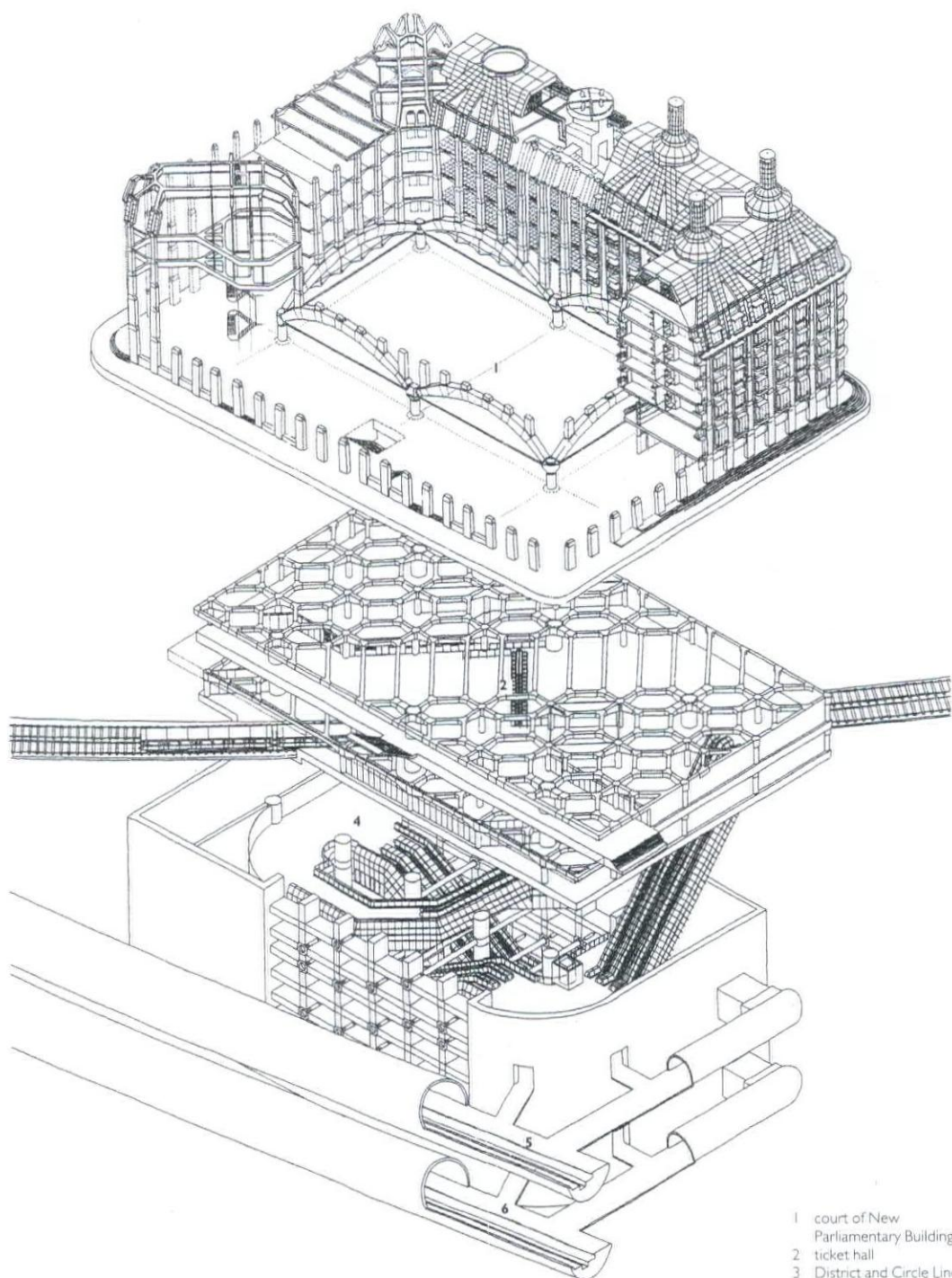
Westminster station, one of the most dramatic on the Jubilee Line, is sublime in the proper sense of the word: awesome in both experience and execution.

The Westminster underground station must have been one of the most complicated to make on the whole of the Jubilee Line. Its tracks are a good deal further down than those of the District and Circle Lines which curve through the site of the New Parliamentary Building that is now finishing across the road from Barry and Pugin's neo-Perpendicular Palaces of Westminster. Loads of the massive new building had to be brought down avoiding both sets of tracks. Existing tubes had to be kept in continuous operation (almost unbelievably, they were lowered by a few inches while traffic on the very busy lines was scarcely interrupted). And the whole site had to be treated with great care, for though the great clock tower of Parliament is known all over the world, it (like perhaps the institution it symbolizes) is far from steady, inclined to lean to the north-west, and has always had trouble with its foundations.

The architects designed the new building and the station as an integrated whole – it would have been difficult to have done anything else, for the loads could be got down only in a few places, and in the end, all the main downward thrusts from the inner walls of the courtyard are taken on six massive columns. Other loads are transferred to the perimeter of a very big stiff concrete box which contains the escalators and lifts that lead down to the deep platforms.

To avoid disturbing Big Ben, the Jubilee Line at this point is stacked up, so that the eastbound track is on top of the west directed one. Hence the need for

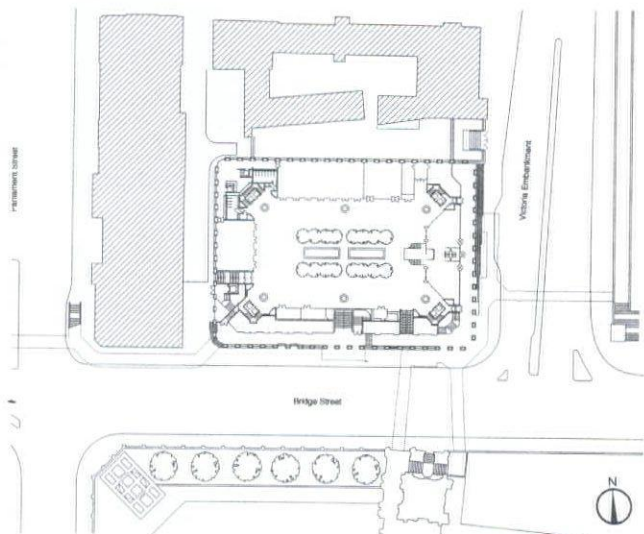
1 District and Circle Line platforms: heights of upper two levels were compressed between level of these lines and street.
2 Descending into the Piranesian void: the huge box under the new Parliamentary Building.



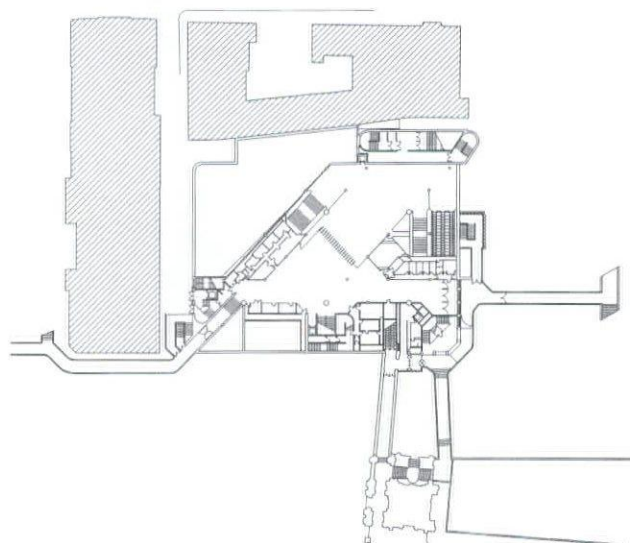
- 1 court of New Parliamentary Building
- 2 ticket hall
- 3 District and Circle Lines
- 4 intermediate level
- 5 Jubilee eastbound
- 6 Jubilee westbound

exploded isometric

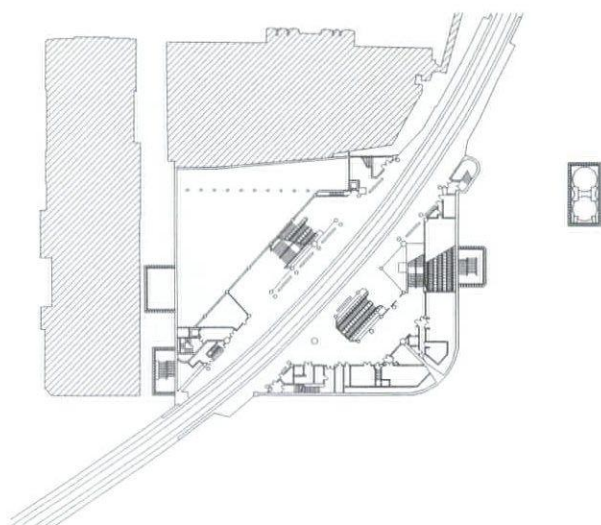




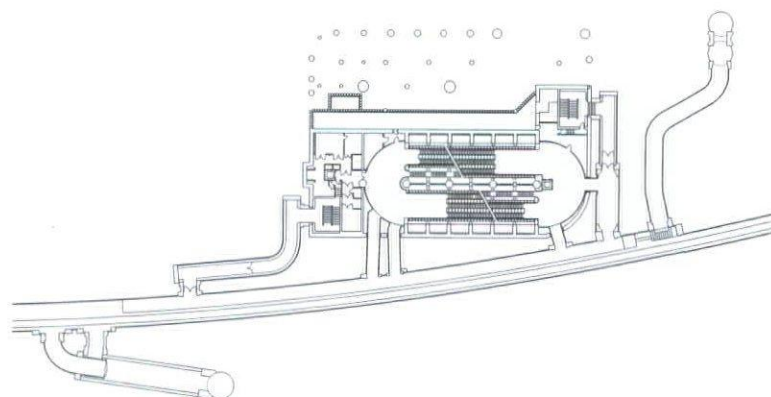
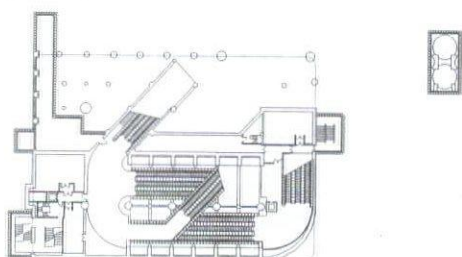
street level (scale approx 1:3300)



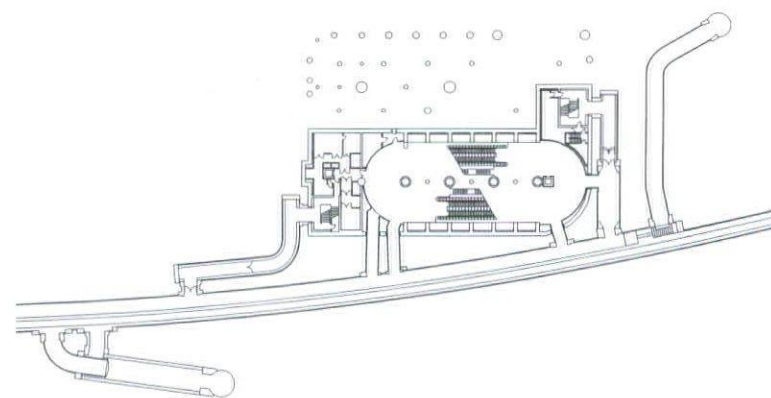
ticket hall showing under-street connections to Parliament



District and Circle Line level

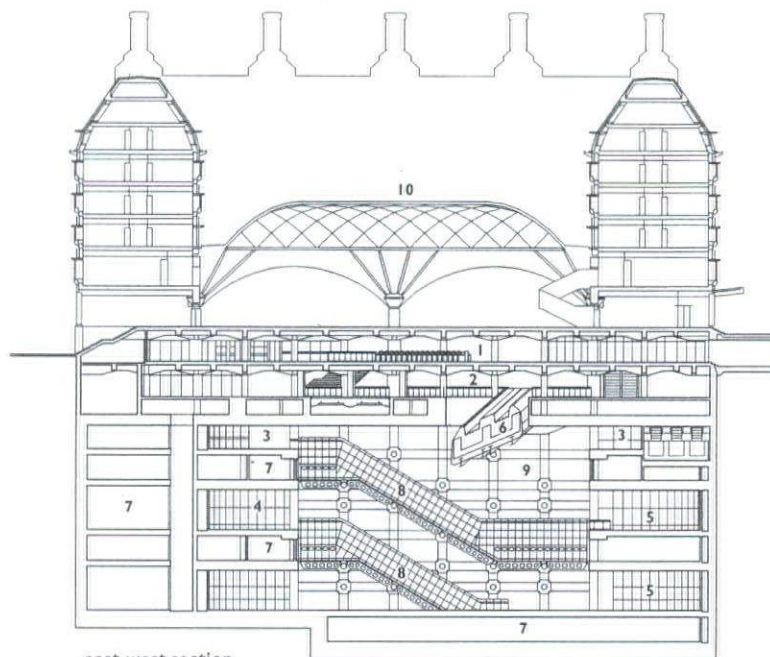


Jubilee Line eastbound



Jubilee Line westbound

- 1 ticket hall
- 2 District and Circle Line
- 3 main interchange level
- 4 Jubilee Line east
- 5 Jubilee Line west
- 6 escalators from upper lines to interchange
- 7 plant
- 8 escalators to Jubilee
- 9 box wall
- 10 New Parliamentary Building



east-west section



**UNDERGROUND STATION,
WESTMINSTER, LONDON**

ARCHITECT
**MICHAEL HOPKINS &
PARTNERS**

3
Intermediate level.

4
Escalators plunge down into the great
chasm past concrete diaphragm walls
strangely reminiscent of catacombs.

an intermediate landing at the top of the box to which escalators descend from the level of the upper lines. The box is the most dramatic volume in the complex. Upper levels are, by nature of the vertical geometry of the site, constrained in height – so they are not very remarkable (though serviceable enough). In the huge escalator box, space is awesome, almost Piranesian, articulated by the civil engineers' columns and flying beams that stiffen the diaphragm walls, which are themselves gridded by deep beams with rough concrete behind. You descend, almost as if you are moving through a section cut through ancient catacombs. This three-dimensional grid is dramatically slashed by stairs and escalators, and the whole place glistens slightly, lit dramatically by washes and occasionally spotlights for emphasis. Concrete mix has been carefully chosen so that a light sand-blasting has exposed mica in the fine aggregates. Cool grey austerity is continued in the perforated silvered steel cladding of the escalators and platforms. It all seems so calm and ordered now, but it must have been hell to make: it took six years and cost about £20 million. Worth it though.

Architect

Michael Hopkins & Partners, London

Design team

Michael Hopkins, John Pringle, David Selby, Patrick Nee, Arif Mehmood, Annabel Hollick, Gail Halvorsen, Margaret Leong, Amir Sanei, Niels Jonkhans, Alexandra Small, Taro Tsuruta, Toby Birtwhistle, Gordon McKenzie, Emma Adams, Ian Milne, Georgina Hall, Geoff Whittaker, Gina Raimi, Rebecca Chipchase, Hannah Wooller

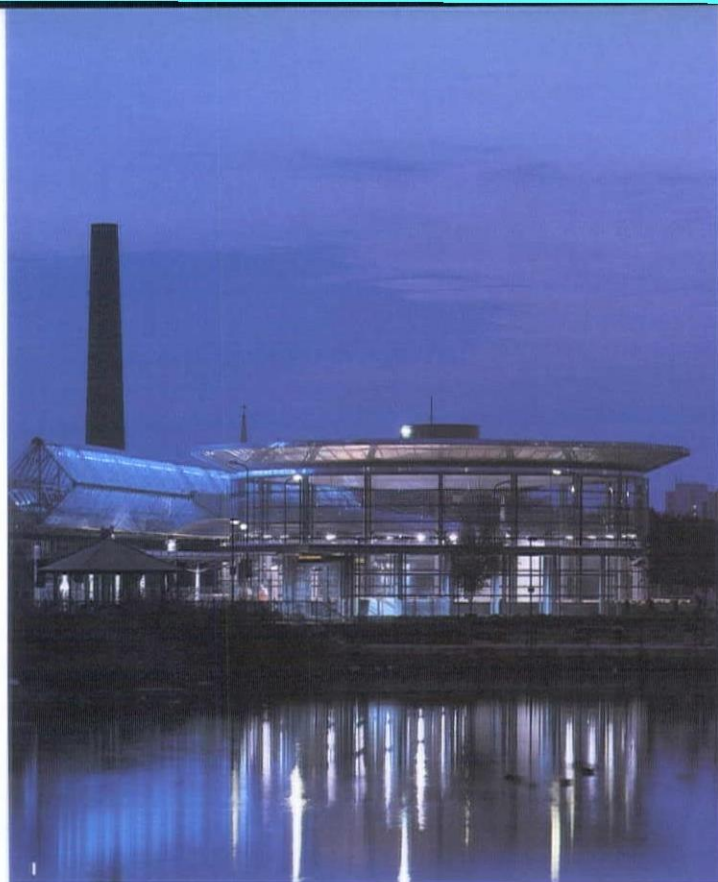
Civil and structural engineer

G. Maunsell & Partners

Photographs

Dennis Gilbert/VIEW





1
At night the bus station glows with blue radiance.

2
North end of the building with symmetrical, glass-edged wings either side of crystalline spine.

3
South end and bus exit onto Surrey Quays Road.

4
Underside of main canopy clad with perforated aluminium panels and louvres. Transitional canopy (to right) has glass roof supported by tubular steel structure and profiled concrete columns.



Eva Jiricna Architects' bus interchange at Canada Water in London docklands was built as part of the Jubilee Line masterplan and is connected to the new underground station and an existing station on the East London line. As well as providing a civilized and logically planned shelter with modern amenities for staff and passengers, the scheme had to accommodate the flow of people and vehicles, and protect nearby housing from noise and pollution.

Jiricna's elegantly engineered structure runs back northwards from the curve of Surrey Quays Road; on the east, it is cut away to accommodate a circular drum which is the entrance to the underground. A new pedestrian crossing on the north-east connects the bus station with nearby housing, and buses entering on the east side of the site, run round the periphery and exit on the west. The place should feel an integrated, working part of the neighbourhood. Much of the boundary wall is transparent giving views of landscaped grounds.

The interchange consists in the main of a superstructure, a canopy which sails over the site, over peripheral bus stops and a central waiting area, and over a stone-clad accommodation block with operations rooms and lavatories, a controller's office and refreshment kiosk. Acting as a huge acoustic buffer, it is made up of two massive wings. These are aerofoil in section, constructed from a series of transverse steel trusses, and cantilevered from a central truss supported on a row of five columns. The wings are stabilized by struts and ties attached to boundary structures on the north and west, while lateral loads on the columns are resisted

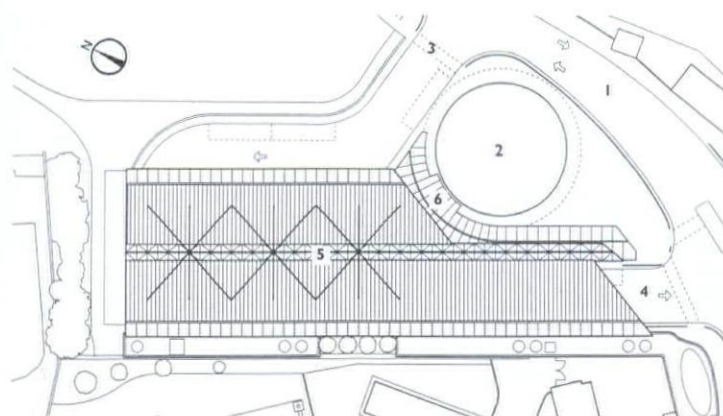
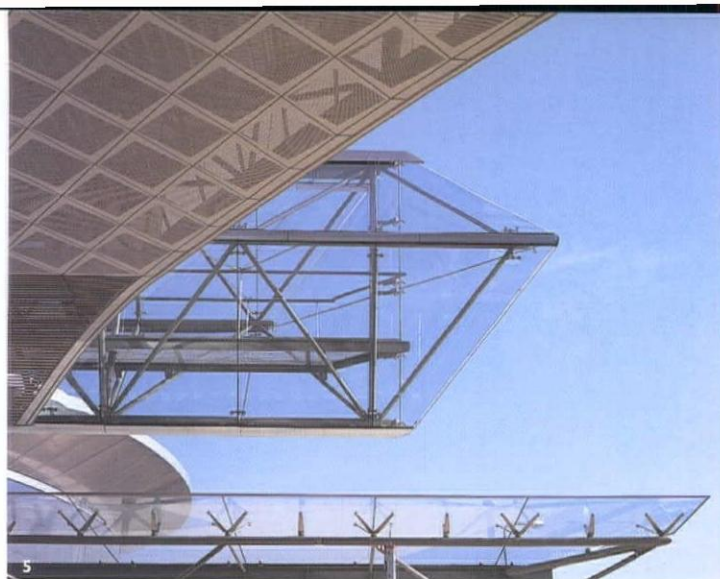


QUAY SIGNATURE

BUS INTERCHANGE,
CANADA WATER, LONDON
ARCHITECT
EVA JIRICNA ARCHITECTS



A bus interchange at Canada Water in London's docklands is an elegant asset to the developing neighbourhood and provides a link with the Jubilee Line Extension for passengers from outlying districts.



site plan

by a series of diagonal rods and bracing, so that the canopy becomes a single stiff plate.

This polished, aerodynamic structure is exotic in the bleak neighbourhood of scattered tower blocks and new estates. If the wings are massive, they are made to seem lighter by being edged with glass so that the canopy appears to hover above the ground; at the same time, the transparent tips admit daylight to bus stops underneath. At night, the underside serves as a large reflector for uplighters and the wing tips and crystalline spine glow with blue radiance.

A transitional, separate canopy inserted underneath the edges of the main canopy and tube entrance reconciles the two buildings. This elegant edgy little piece of the interchange jigsaw has a glass roof supported by a pyramidal steel structure and profiled concrete columns.

Beneath the sheltering roof, use of a few materials is intended to promote a calm, consistent ambience. Reconstituted stone, which clads the accommodation block, and paving blocks are all in London stock colours; rigidized metal has been used for doors and columns. Waiting areas are simple glass enclosures and, as is usual with this practice, are cleanly detailed and furnished.

PENNY MCGUIRE

BUS INTERCHANGE, CANADA WATER, LONDON

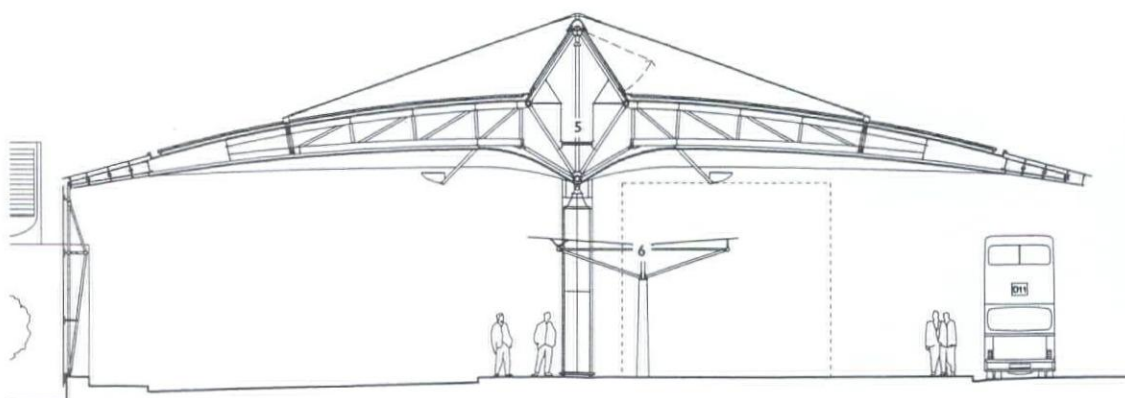
ARCHITECT

EVA JIRICNA ARCHITECTS

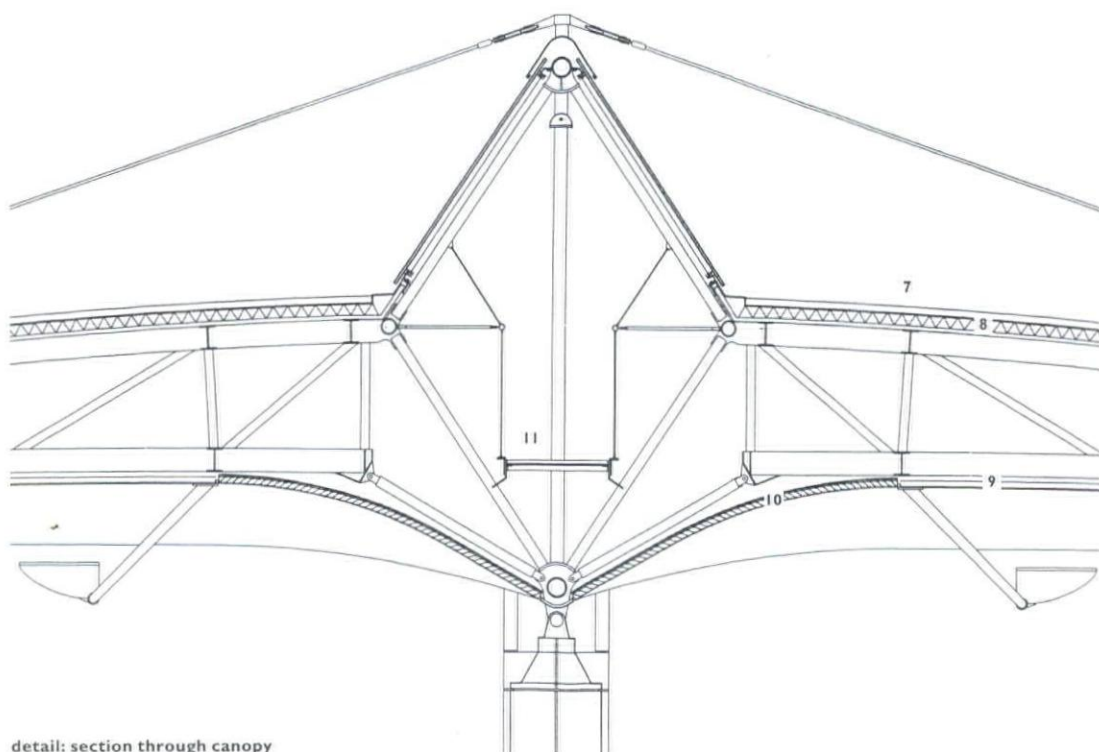
5

Crystalline spine projects where main canopy has been cut away to accommodate tube station entrance drum. Beneath: glass roof of transitional canopy.

- 1 underground entrance
- 2 Surrey Quays Road
- 3 bus entrance
- 4 bus exit
- 5 main canopy
- 6 transitional canopy
- 7 natural anodized Kal-zip roofing
- 8 sound insulation
- 9 perforated aluminium panels
- 10 louvres
- 11 maintenance walkway



section canopy (scale approx 1:255)



detail: section through canopy

Architects

Eva Jiricna Architects, London

Design team

Eva Jiricna, Duncan Webster,
Christopher Mascall, Geoffrey Whittaker

Lighting consultant

Lighting Design Partnership

Photographs

Dennis Gilbert/VIEW, except nos. 2, 3 by
Richard Bryant/Arcaid

TRAVELLING LIGHT

Through a series of strong, simple interventions that help to reorder the public realm, this new bus station for Walsall dignifies the experience of bus travel.

**BUS STATION, WALSALL,
ENGLAND**

ARCHITECT

**ALLFORD HALL MONAGHAN
MORRIS**

1
The sleek, elliptical canopy hovers
surreally over the bus station
concourse like a flying saucer.

Hard on the heels of Walsall's New Art Gallery (AR May 2000) comes further evidence of a minor urban renaissance in this small Midlands town. The new bus station by Allford Hall Monaghan Morris replaces an existing one, which had long become a disruptive and dreary element in the town centre. The new scheme reorders the site through a series of strong, simple interventions that civilize the experience of bus travel. The design was the outcome of a competition, held by Centro, the local transport

body, and was the first of its kind for a bus station in the UK.

The site lies in a conservation area next to the main shopping precinct. Its boundary conditions vary significantly, and include a church, the backs of large department stores and a post office yard. Reconciling the complexities of vehicle and pedestrian circulation and making sense of a fragmented townscape were the brief's major challenges, but Allford Hall Monaghan Morris's solution is both functional and elegant.

Three bus islands and a concourse building are sheltered by a streamlined elliptical canopy. Supported by slender steel columns that splay arboreally at their tops, the concrete canopy is perforated by a series of different-sized oculi. Light filters down through the holes, bathing the concourse below in a soft and slightly mysterious radiance (a tableau that irresistibly recalls Powell & Pressburger's famous cinematic vision of heaven in *A Matter of Life and Death*).



**BUS STATION, WALSALL,
ENGLAND**

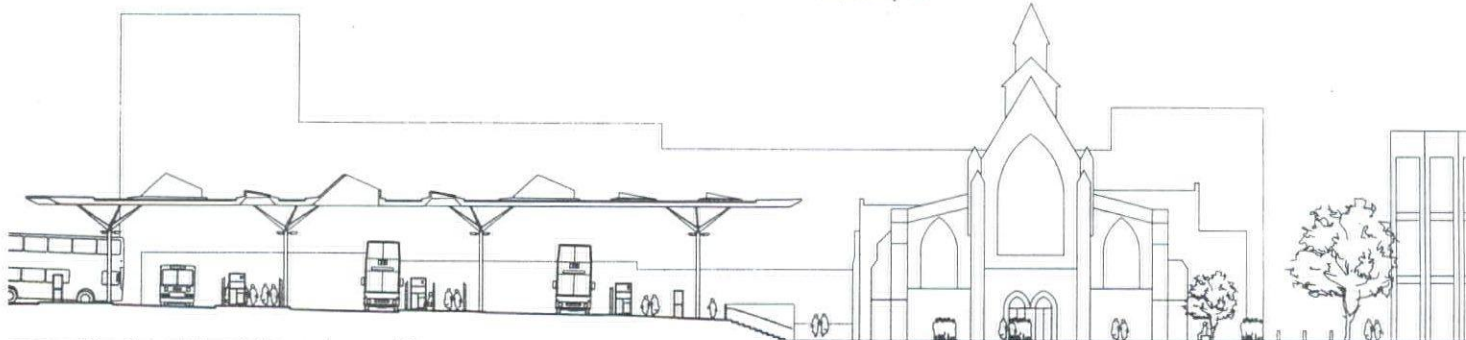
ARCHITECT

**ALLFORD HALL MONAGHAN
MORRIS**

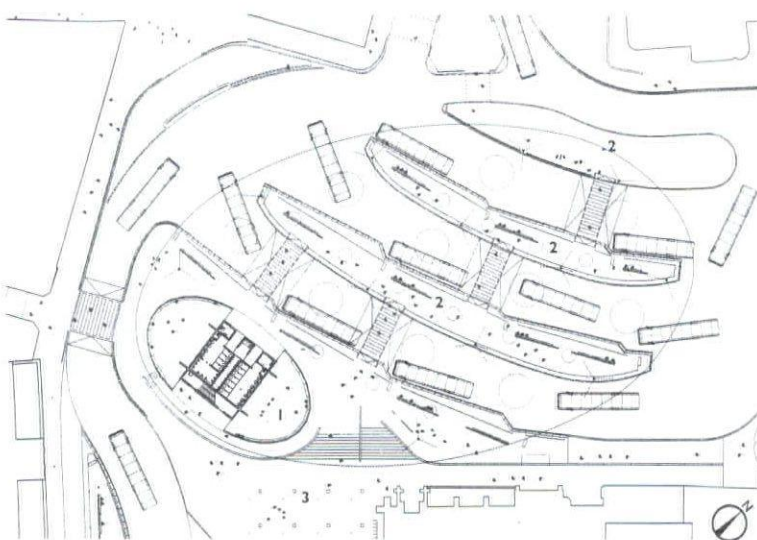
- 1 concourse building
- 2 bus islands
- 3 new public square



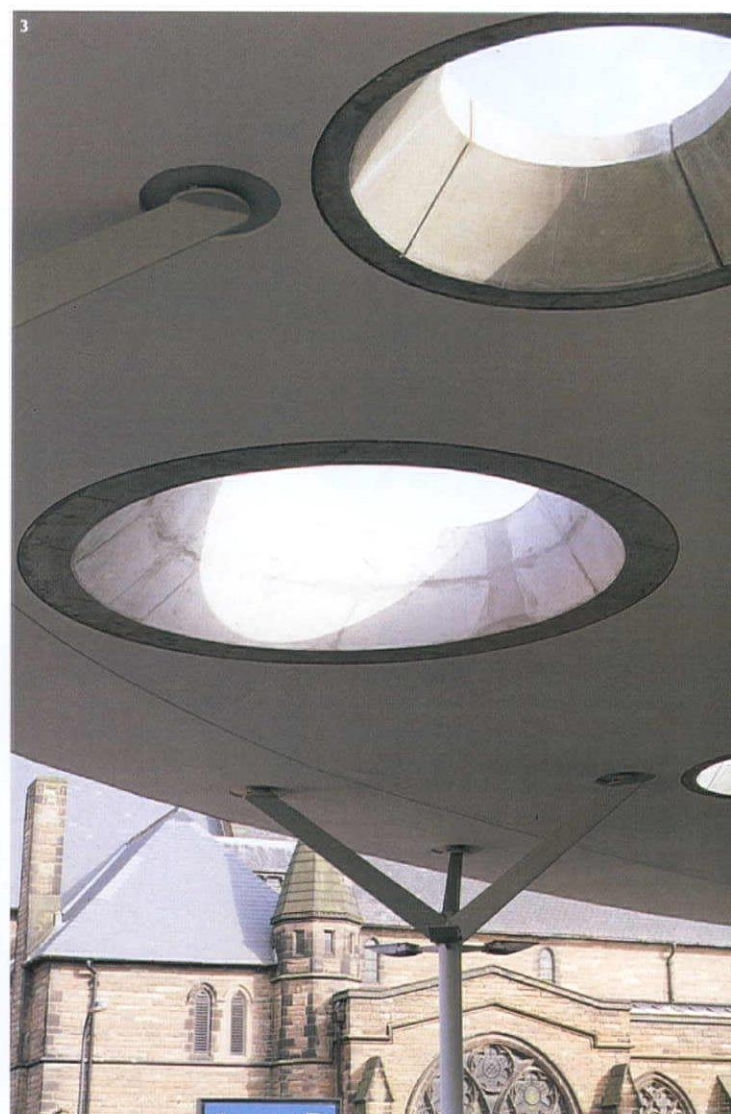
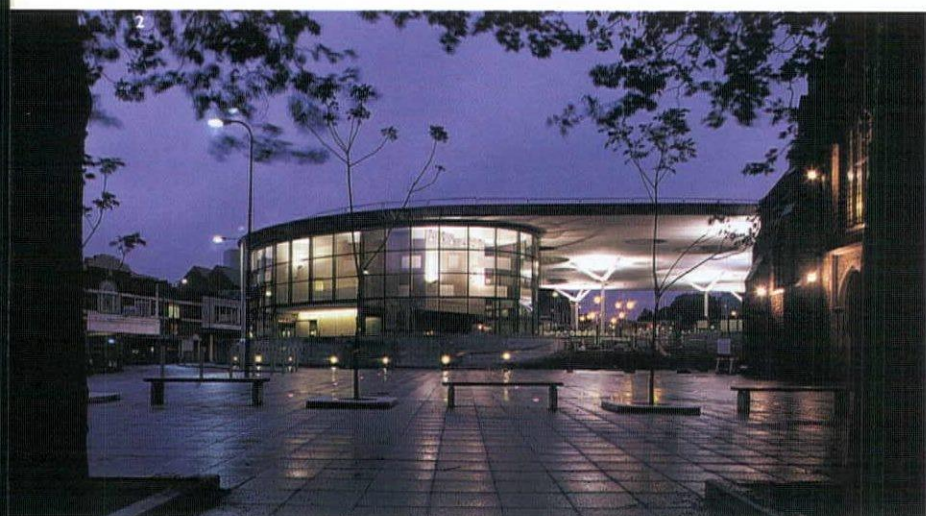
location plan



cross section through bus station and new public square



ground floor plan (scale approx 1:1000)



2
Concourse building addresses a new public square, helping to reclaim the urban realm.

3
Light filters into the concourse from a series of different-sized oculi cut into the concrete canopy.

4
Glass screens enclose bus stands, protecting passengers from fumes.

5
Heaven as cinematically envisaged by Powell & Pressburger in *A Matter of Life and Death*.

The strong monolithic form of the canopy unites the disparate urban realm and gives the bus station an appropriately heroic sense of identity. The geometry of the ellipse mirrors and orders the flow of vehicle traffic in and around the building. Full scale mock-ups of bus-lane configurations were carried out to achieve the most efficient layout. Crisply detailed glass screens enclose the bus islands, protecting pedestrians from traffic fumes but also making

circulation instantly legible. A two-storey concourse building containing waiting rooms, ticket hall and offices occupies the south-west corner of the site, addressing a new square. What was formerly a dispiriting urban backwater dominated by traffic has been transformed into a coherent and dignified public realm. Allford Hall Monaghan Morris's scheme shows the benefits of enlightened patronage by endowing a dreary typology with clarity and civitas. C. S.

Architect

Allford Hall Monaghan Morris, London

Project team

Simon Allford, Ceri Davies, Jonathan Hall, Susan Le Good, Victor Kite, Paul Monaghan, Peter Morris, Louise Munch, Peter Sargent

Structural engineer

Atelier One

Civil engineer

Clark Smith Partnership

Services engineer

Atelier Ten

Landscape architect

Watkins:Dally

Public artists

Tanya Kovats, Alex Hartley

Photographs

Timothy Soar

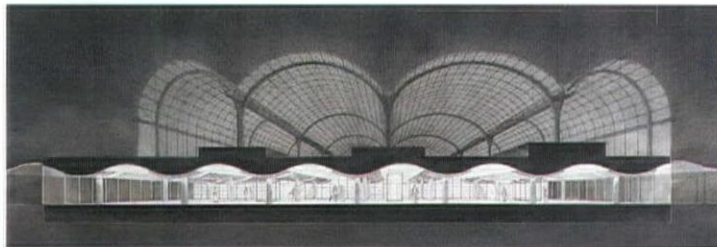


At the 1996 Venice Biennale, there was a show of projects by German Rail entitled the Renaissance of the Train Station. It was a celebration of the privatization of the Deutsche Bahn AG, the most wonderful train service in Europe, clean, comfortable, meticulous, relatively cheap, frequent and almost always on time. The show was a reminder and evocation of the great days of rail travel in the late nineteenth and early twentieth centuries. At the same time it was an advertisement of future intent: to make the railway station once again part of the public realm; to make it a celebration of arrival and departure; gateway of the city. Much of what was on display in 1996 was devoted to re-exploring the potential of the great glazed train shed: the luminous arcade which leads us to the carriage door.

The new Spandau station in Berlin by von Gerkan, Marg &

Partner is the first built result of the programme. On the main line between the new German capital and Hanover, the glass vaults are very close to the suburb's town hall. The architects claim that their main shed is probably the longest glazed hall in the world at the moment, but as we all know, size is not everything. Spandau station, as well as being big, is a generous space, welcoming and dignified.

And for all its seeming simplicity, it has been rather complicated to make. Curving rail tracks made the geometry of what is essentially a simple parti: a long parallel pair of glazed vaults carried on Y-shaped central columns, into a subtly complex figure, in which each pane of glass has slightly different dimensions. Comparisons are inevitable with Grimshaw's London Waterloo International terminal for Channel Tunnel services (AR



diagrammatic cross sectional perspective showing undercroft

STATION MASTER

The glazed train shed is having a revival as one of the most important elements of modern ecologically conscious cities. In Berlin, this one sets standards of size, simplicity and elegance.

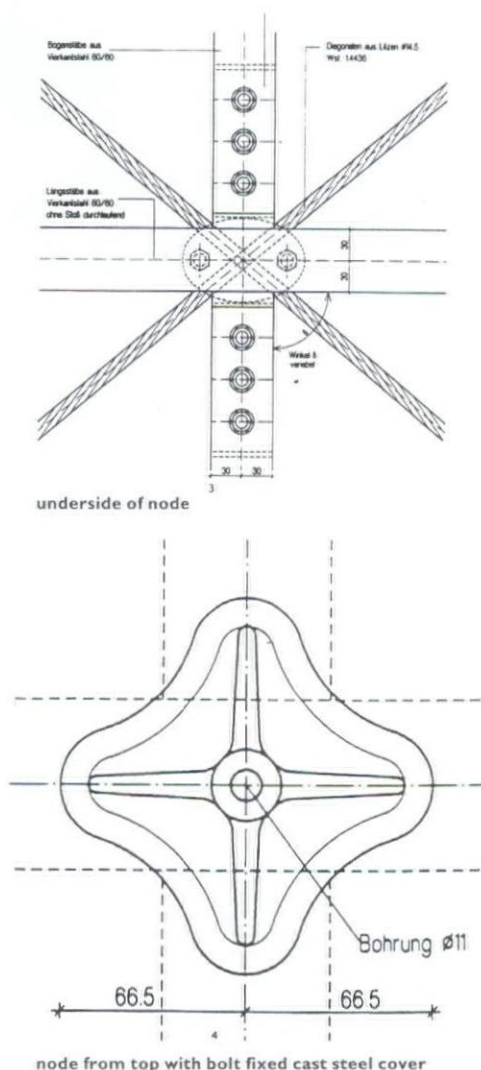


TRAIN STATION, SPANDAU, BERLIN, GERMANY
ARCHITECT
VON GERKAN, MARG & PARTNER



- 1 At Spandau sheds are needed for both local and national services.
- 2, 3 Platform structures are executed with same Rational sensibility as roofs. Light fittings were chosen to give repeated reflections so that the whole space sparkles at night.
- 4 Curve of tracks caused whole geometry to be very complex: each pane is different size. Metal panels at vault apex act as ventilators.





September 1993). Computerized analysis, cutting technology and logistical assembly are similar, but the results are very different.

Grimshaw and engineer Anthony Hunt had to cope with a volume which was caused to taper in both height and breadth by the nature of the tracks and site; and it had to accommodate some quite extraordinary movements in flexion caused by the very heavy international trains rolling over the old brickwork viaduct underneath. The Spandau building did not have to taper in height, so it can have regular vaults formed as virtually simple arcs. Both buildings are rational, but in Berlin the spirit is Rationalist, while in London Organic is the ethos.

At Spandau, secondary arches bear on longitudinal beams (which also act as gutters) which span between the Y-shaped columns set at 18m centres. Vaults are held together and stiffened by an internal diagonal grid of stainless steel cables connecting the screw-fixed stainless steel bosses which form each junction in the roof. Roofs

are entirely glazed, apart from metal strips which run along the apex of each vault and provide ventilation. Cantilevered uplighters set 3m apart provide multiple reflections on the glass, making the place more crystalline and magical at night. Small structures on the platforms, waiting rooms for instance, are executed in glass and steel with the Rationalist rigour that informs the main structure.

Platforms are 5m above street level; in the podium beneath, there is a cross street with ticketing, shops and services spanned by the bridge construction of the platforms and tracks. A wave-form ceiling allows for the different heights determined by the structure. The shape is intended to increase the apparent volume of the undercroft, but it inevitably seems rather troglodytic (though well lit), not a bad thing in itself, for the spatial compression of the entry helps enhance the airy luminosity of the glass vaults when you approach them up the escalators. ANNE VYNE

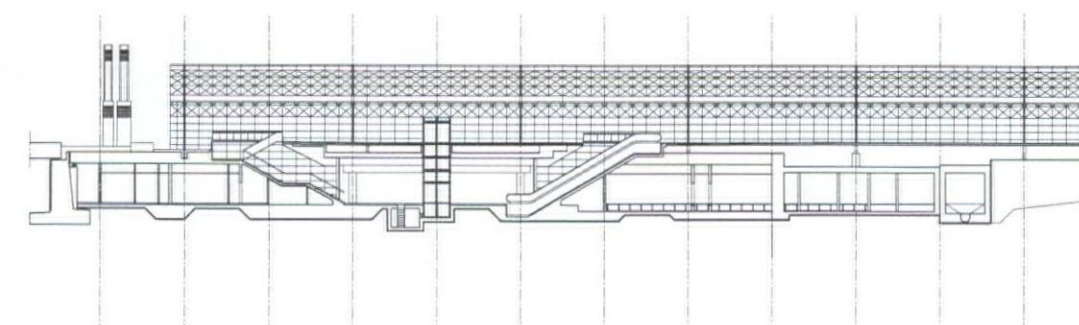
TRAIN STATION, SPANDAU, BERLIN, GERMANY

ARCHITECT

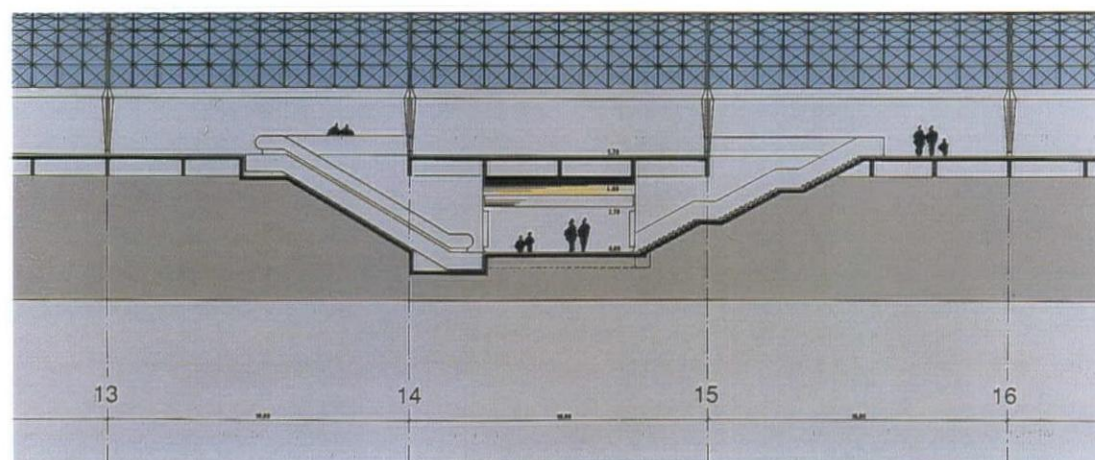
VON GERKAN, MARG & PARTNER

5

Roof is bound together and stiffened with a diagonal lattice of stainless steel tension cables linking chrome steel nodes, which are screwed together in situ.



long section through station hall (scale approx 1:1000)



section through pedestrian cross street

Architect

Von Gerkan, Marg & Partner, Hamburg

Design team

Meinhard v. Gerkan, Hubert Nienhoff, Sybille Zittlau-Kroos, Brigit Keul-Ricke, Elisabeth Menne, Almut Schlüter, Peter Bozic, Agnieszka Preibisz, Margret Bothig, Diane Berve, Karl Baumgarten, Matthias Wiegmann, Gerd Meyer, Andreas Dierkes, Paul Wolff, Marietta Rothe, Kerstin Struckmeyer, Peter Schuch

Structural engineer

Schlaich, Bergmann & Partner

Photographs

1, Falk/Bau Bild Berlin; 2, 3, 5, Hans Bach; 4, H.-Chr Schink/Punctum



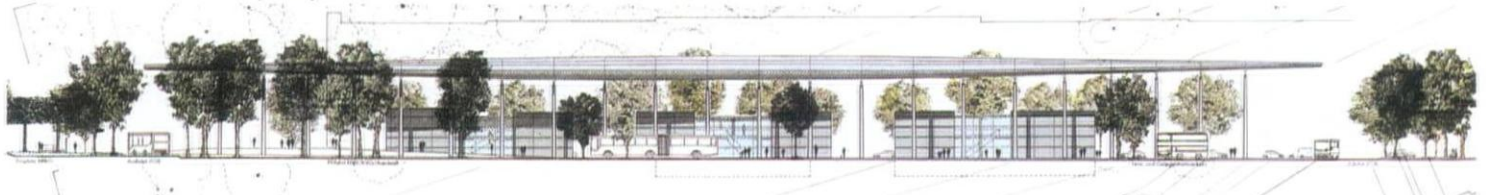
CENTRAL BUS STATION,
HAMBURG, GERMANY
ARCHITECT
SILCHER.WERNER + REDANTE

CIVILIZING THE BUS

Too often, bus stations are dreadful, offering inefficient dark, dank and stinking shelters to travellers, who are automatically marked down as second class citizens. Here is a design which promises to make bus travel decent, and contribute to the texture of the city.



elevation to Adenauer Allee (north)



elevation to park (south)

1
Model from south (park): an airy and dignified arcade.

2
Ingenious traffic management allows bus manoeuvres to take up much less space than usual, allowing the bus station to fit into the city.

Bus stations in literature are urban romantic reflections of raw metropolitan life. In reality they often look like cattle pens for fourth class travellers, those too poor for private cars, fast trains or planes. The necessary promotion of environment friendly travel requires this shabby image to be drastically overhauled.

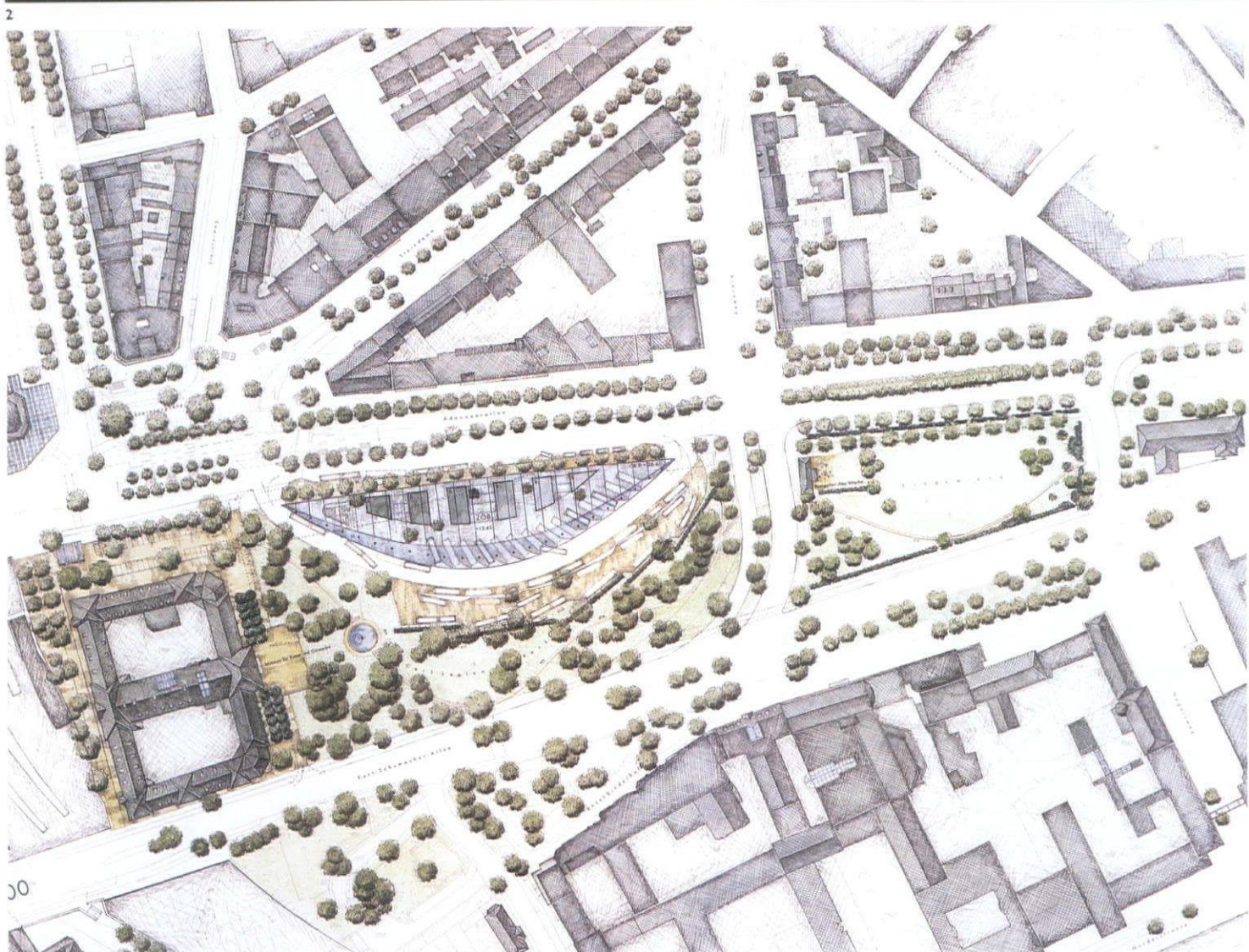
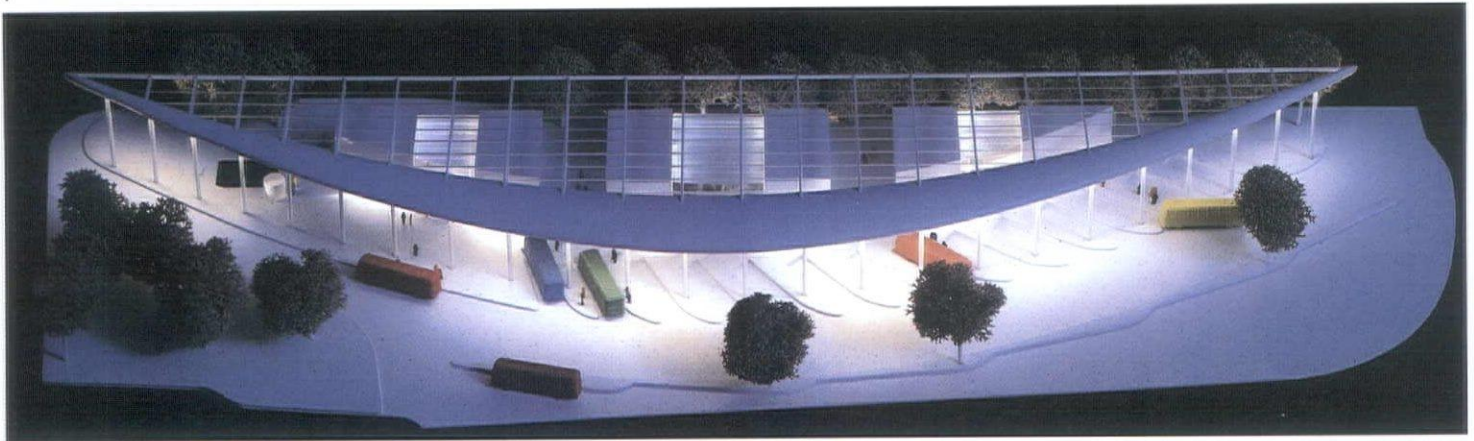
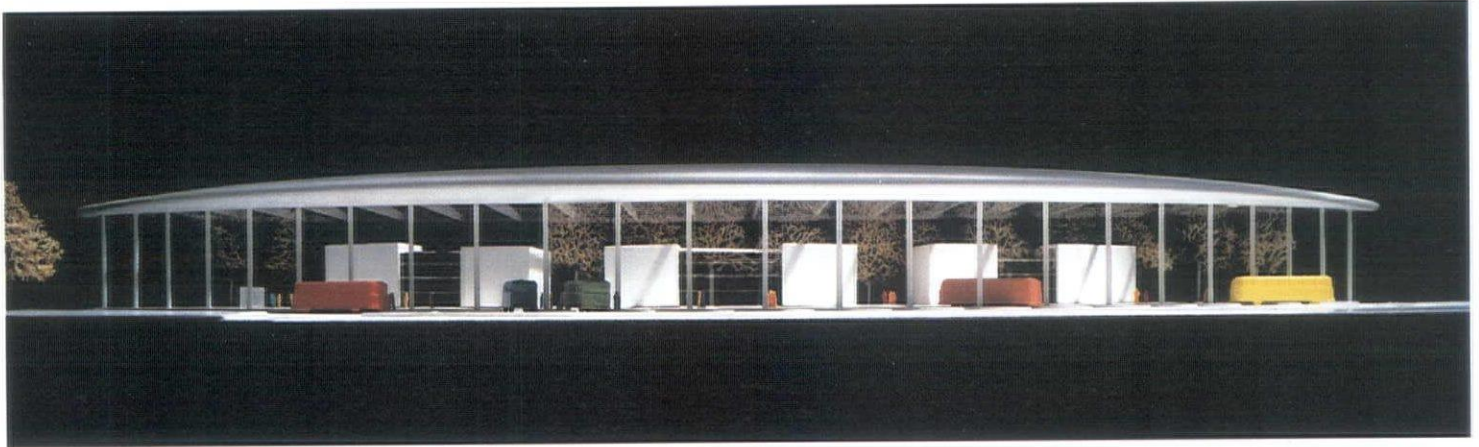
In 1998 Hamburg held a competition to replace their ZOB (Central Bus Station) which lies a stone's throw from the central train station and beside Hamburg's Applied Arts Museum. Flanked by a hamburger chain operating out of an ex-water tower, a row of shabby travel agents specializing in East European tours, and a social services container where drug addicts obtain clean needles, the present ZOB is a marginalized inner-city facility.

Architects Silcher.Werner + Redante, who won against several national and eight international firms, saw the need to raise ZOB's public profile by creating a city landmark structure. The crescent-shaped translucent roof, sheltering kiosks and travellers, is likely to be as distinctive and

unique to Hamburg as the glazed barrel vaults of the city's nineteenth-century railway station. Supported 12m above the ground by a colonnade of slender steel columns, this glass wing structure will be 8-9m across, and stiffened, using the spoked wheel principle, by a skeleton of steel plates 20-35mm thick between the two curved steel collar edges. When illuminated at night, it will glow like a fluorescent cloud.

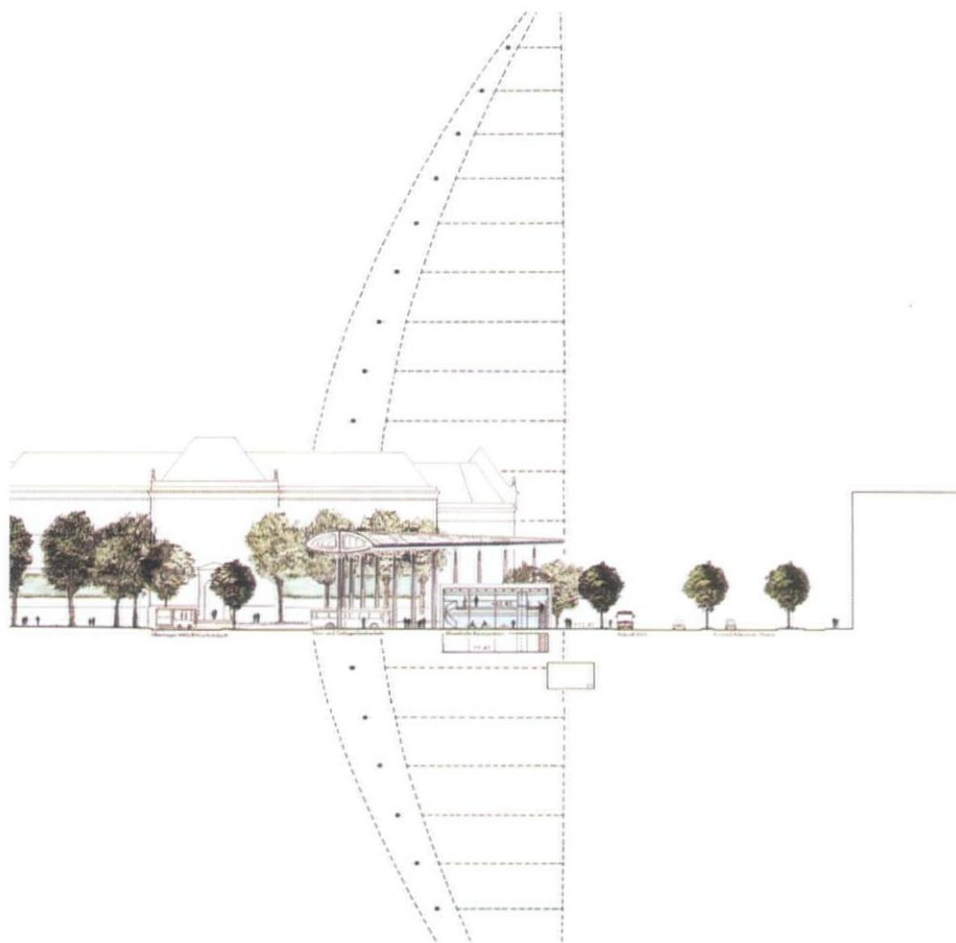
Steel framed service modules below the roof are to be structurally independent. Manufactured in a Hamburg shipyard, they will be assembled and bolted on site with opaque walls constructed like car body shells for ticket offices, sanitary services, electrical and mechanical rooms, bus inspectors and drivers canteen and rest rooms.

In contrast public areas (foyer and restaurants) will be seen through transparent spaces with glass walls held in a tennis net steel framework. Metallic silver grey finishes and minimal but bright colour accents are hoping to give ponderous bus transport a dynamic, space port docking, image. Another aim was to reduce the

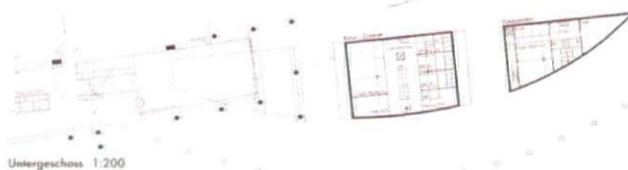
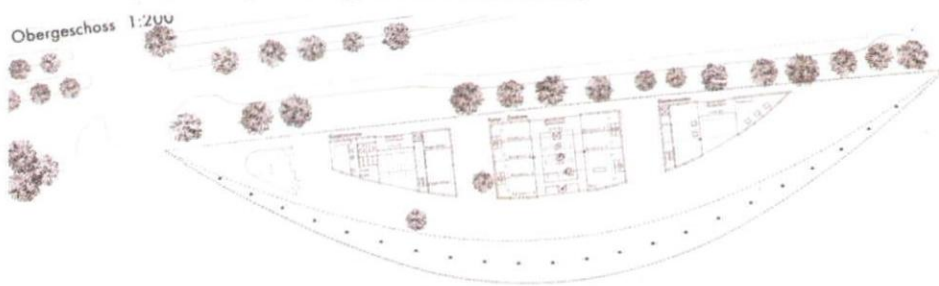


site plan (scale approx 1:630): bus station as urban element

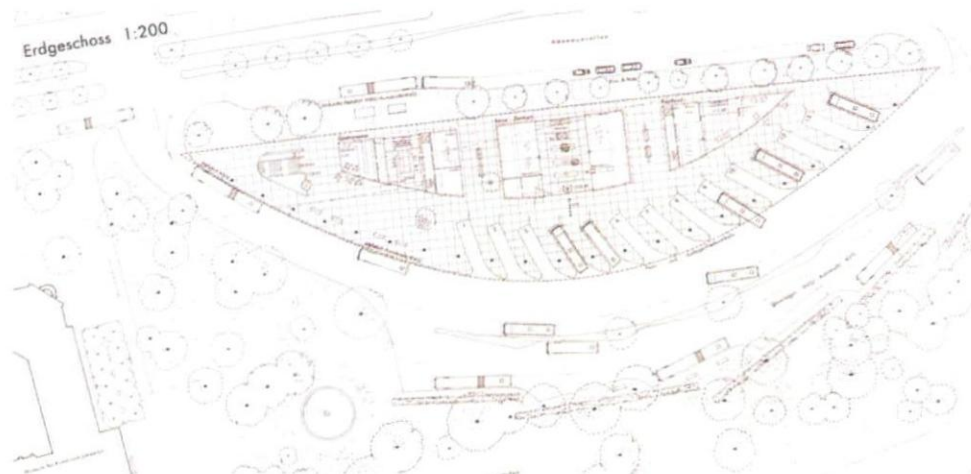
**CENTRAL BUS STATION,
HAMBURG, GERMANY**
ARCHITECT
SILCHER.WERNER + REDANTE



cross section (projected on plan with Applied Arts Museum behind)



first floor: shops, café, travel agents



ground floor: travel centre, fast food, café (scale approx 1:400)

impact of the bus station and increase surrounding greenery and traffic free zones. With transport logistics developed by Lego the Danish toy manufacturer, the asphalt wasteland generally associated with traffic nodes has been halved. Buses will reverse out of terminus lanes instead of driving through as they did in the former S-lane pattern. This space saving allows the road between the former island bus station and museum to be deleted and replaced with a safe and direct pedestrian plaza link to the museum's nineteenth-century grand entrance. A swathe of soft landscaping, trees, ground covering bushes and seating along paths, extending from the plaza and skirting the ZOB facilities should also help filter carbon dioxide and fumes.

Starting on site in October 2000 the ZOB will continue to run services during construction. The building, at a cost of 25 million Deutschmarks, is programmed for completion by the end of 2001.

LAYLA DAWSON

Architect

Architekten Silcher.Werner + Redante, Hamburg
Sven Silcher, Asmus Werner, Norbert Redante

Structural engineer

Schlaich Bergermann & Partner, Stuttgart

BUS SHELTER, MOSCOW,
IDAHO, USA
ARCHITECTS
MICHAEL CULPEPPER AND
GREG TEW

BUS STOP

Well designed small transport structures, like this country bus stop, can help to structure environment and life.



Set commandingly at a junction of forest roads in rural Idaho near Moscow, there is a strange little structure which from a distance shines like a small temple against the dark green trees. Closer up, it resembles a large silver sentry box with a bulging front, suitable for a portly preposterous yet amiable park keeper out of a Hans Andersen tale.

In fact, it is a school bus stop by Michael Culpepper and Greg Tew, made to protect the children of a group of families. They wanted to make it as cheap and easy to erect as possible while giving it presence. Each side is cut from a standard 8 x 12 ft (2.4 x 3.5m) sheet of three quarter inch (19mm) ply – the curves of the envelope give the structure stiffness. The whole was prefabricated and delivered complete to the steep site, where it rests on beams supported on concrete piles.

Inside, the warm plywood is exposed and seats are arranged step-like so large and small children alike can look out over the forest. It is a decent little contribution to the notion of public realm for a country community. E.W.

Architects
Michael Culpepper and Greg Tew, Seattle



section



plan (scale approx 1:100)

1 Prefabricated in ply, the structure is ready to move to its site.

2 Modest, but with presence, quietly standing in the forest.



BUILDING BRIDGES

A new link spanning the Sound between Sweden and Denmark unites the countries economically and culturally and connects southern Scandinavia to central Europe.



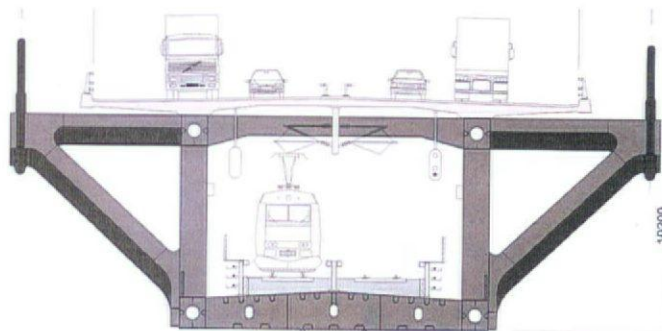
1
Øresund link from north with Saltsjöholm island in foreground; bridge and Swedish coast to left; tunnel and artificial peninsula off Amager on right.



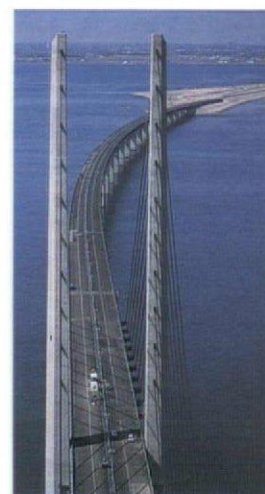
2

2
From both abutments bridge ramps up with straight gradients to 57m high bridge over navigation channel near middle.

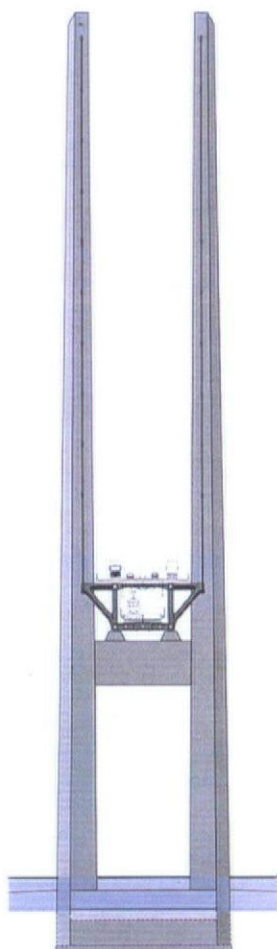
3
Motorway over railway.



cross section approach span



3



cross section of cable-stayed bridge

The official opening in July this year of the Øresund link joining Sweden to Denmark will be momentous. For while signifying the end of Sweden's (and Norway's) isolation from the rest of Europe, it will unite two metropolitan areas – Malmö in the east, and Copenhagen in the west, each with a rich cultural life – and establish the Øresund Region as an industrial entity capable of growth and attracting investment. The concentration of IT research, biomedical and pharmaceutical industries in the region is already formidable with the potential of becoming internationally pre-eminent.

Measuring about 16km in extent, the new link is part of a system of others either

completed or planned in and around Danish waters connecting the road and rail systems of Sweden and Norway with central Europe. No-one of course quite knows the psychological, political and economic implications of this. Developments under way on each side of the Øresund link, and the steady growth of a dynamic modern business centre may constitute a powerful attraction for southern Europe.

On the Swedish side, an adventurous housing exhibition will be opened next spring. Entitled *Bo01 The City of Tomorrow*, it will consist of a new residential district of 600-700 dwellings constructed in Västra Hammen (the western docks) of Malmö. These are being designed

by internationally known architects such as Santiago Calatrava and Ralph Erskine, as well as younger Danish and Swedish practices.

In Denmark, the new town of Ørestad (AR June 1995) is taking ambitious shape to the west of Copenhagen airport. This town, billed as the 'city of the future', is being built to serve what may be the most powerful new cultural and business centre in northern Europe. At a simpler level, young Danes, attracted by lower house prices and cost of living, are starting to settle in Sweden and commuting to Copenhagen.

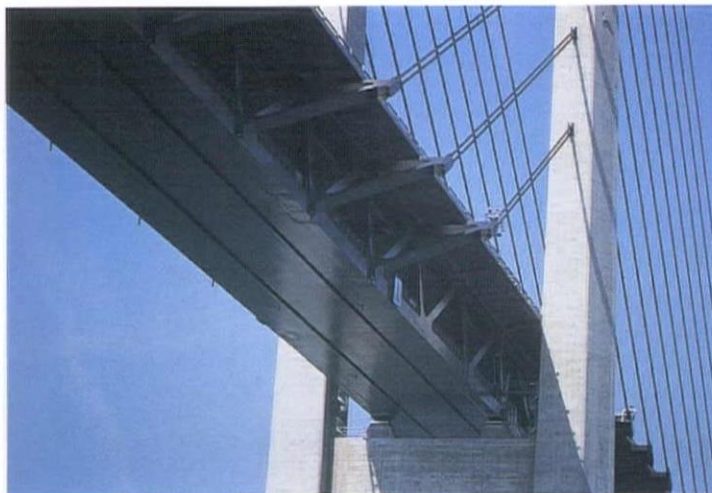
Environmentally, the Øresund scheme presented problems because obstructions in the Danish straits can damage the



4



5



6



7

fragile ecosystem of the Baltic sea. Once an inland lake, the Baltic is the world's largest body of brackish water with a unique marine life, in which species normally associated with fresh or salt water live side by side, and are dependent on intermittent influxes of saline and oxygen rich water from the open seas into the sea's deeper waters. Waters flowing through the Sound are an important part of the system and the link had to obstruct the exchange of water as little as possible.* And it had to respect the tranquillity of the bird sanctuary at Saltholm, an island about halfway across the Sound (to which cattle are still ferried by boat to summer pastures).

The link is a toll-funded motorway and railway, made up of several parts joined into one smooth whole. On the Danish side, proximity to Copenhagen airport made a bridge undesirable. Instead, the link begins at an artificial peninsula off the island of Amager, south of Copenhagen, where a concrete tunnel slips under the sea and emerges at the new island of Peberholm halfway across the Sound and south of Saltholm. By degrees, the tunnel (which accommodates motorway and railway side by side), turns into a double-decker bridge with cars above and trains beneath and from a distance it looks as though the structure has emerged from a hole in the sea. Measuring about

8km in total, the bridge describes a slow curve across the sea; at the same time it rises gradually to a central cable-stayed bridge over the big international shipping lane, Flintrännan, before descending to Lernacken and the Swedish coast. (Here the railway carries on through a tunnel.)

The gentle swell of the great curves and the lack of dramatic abutments, relates to the wide sea and the rolling landscape on either side. Standing in the middle of the bridge on a misty day, when land, sea and sky become fused and there is only structure disappearing into nothing, is an extraordinary experience of transience.

* The Øresund Bridge: paper no 990890 by Klaus Falbe-Hansen, Ove Arup & Partners.

4 Cable-stayed navigation span.

5 Bridge describes a C curve designed not to obstruct waters in the Sound.

6 Bridge of twin steel Warren trusses with concrete road deck on top and two railways between trusses beneath.

7 Cables attached to free-standing pylons and strung like a harp.

Bridge consultants

ASO Group: Ove Arup & Partners, Sétéc Travaux Publics et Industriels, Gimsing & Madsen Consulting Engineers, ISC Consulting Engineers

ASO Architect

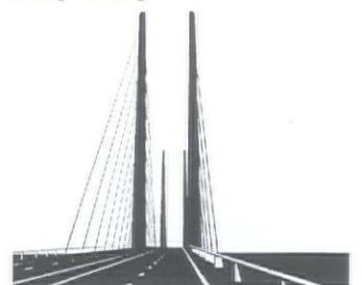
Georg Rotne

Tunnel consultants

ØLC (Øresund Link Consultants): Ramboll, Scandiaconsult, Sir William Halcrow & Ptnrs

Architect

Dissing + Weaitling



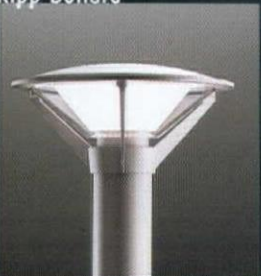
Kipp Pole



Kipp Wall



Kipp Bollard



Kipp

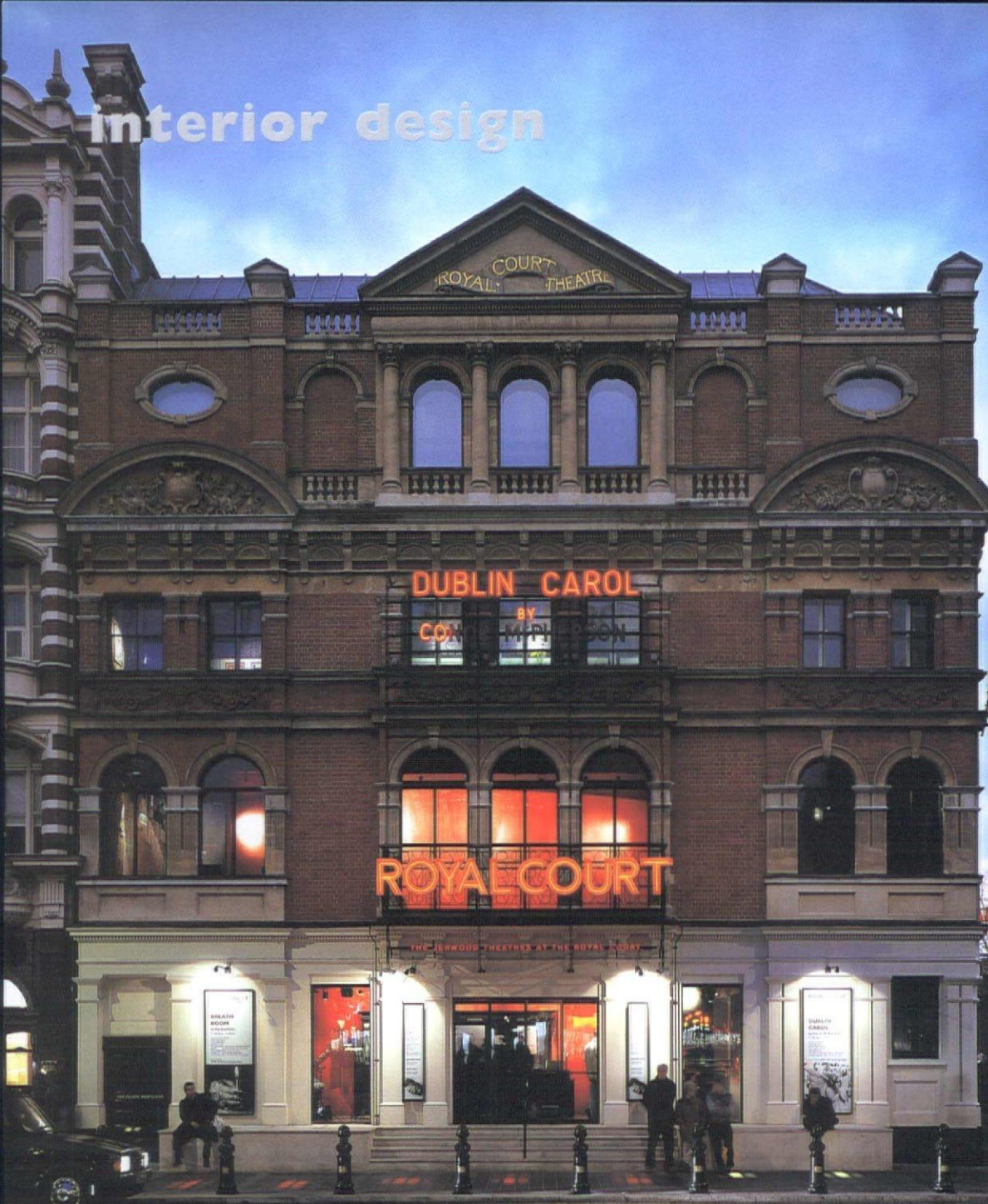
Design: Alfred Homann

**louis
poulsen**

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France +33 1 49 59 68 68 • Holland +31 23 5650030 • Switzerland +41 1 831 19 50 • Australia +61 2 9667 0222 • USA +1 954 349 2525
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Light in Detail

For more details enter 5 on AR enquiry card



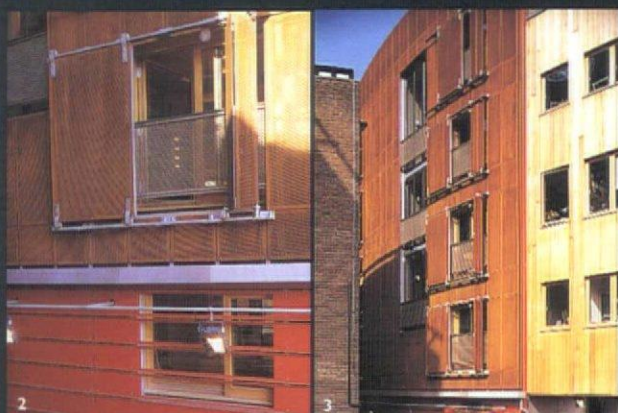
Radical revival

The Royal Court has been revived in a programme that sensitively responds to its pioneering theatrical history.

Originally built in 1888, London's Royal Court has been the home of the English Stage Company since 1956. It is one of the most important theatres for new writing in Europe, presenting a consistently challenging mix of avant-garde and experimental new work in the intimate setting of a conventional Victorian playhouse. Yet by the mid 1990s, the theatre had become dangerously dilapidated. Structurally unsound, technically obsolete and riddled with damp, it had reached the point of physical collapse. Successive piecemeal alterations had confused the building's circulation and reduced its efficiency, but there was little apparent potential for expansion on a tightly constricted site. Despite these drawbacks, Haworth Tompkins were commissioned to undertake an extensive renovation that gets under the skin of the old theatre to invest it with an invigorating new lease of life.

From the start, Haworth Tompkins set out to absorb and crystallize the physical and artistic character of the Royal Court, which might easily have been swept away given the necessarily wide-ranging scope of the redevelopment. The architects spent months with directors, actors, designers and staff in order to understand the nature and workings of this stoutly cherished institution and evolve an architectural language that could reflect both its history and continuity.

The result of Haworth Tompkins' immersion is plainly discernible. Their approach is painstakingly archaeological, an imaginative synthesis of excavation and preservation. Existing basement levels have been expanded, circulation rationalized and new parts added, effectively doubling usable space and freeing up the



- 1 Glowing seductively in the London dusk, the brilliantly restored Royal Court forms a cultural and urban landmark.
- 2 Detail of the layered metal skin on the theatre's new extension. Moveable Cor-ten mesh panels screen dressing rooms.
- 3 Materials such as painted steel, Cor-ten and cedar planking were chosen for their capacity to age gracefully yet robustly.



location plan

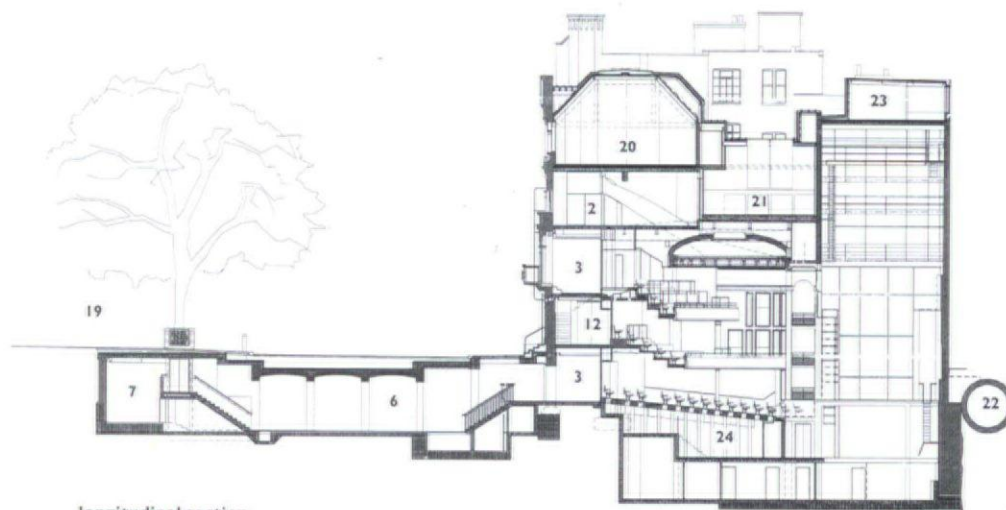
main auditorium and foyers. To the rear, a new nine-storey annexe clad in red-painted steel panels, Cor-ten mesh and cedar planking contains new office spaces and dressing rooms, replacing an Edwardian addition. Behind the cedar skin lies a new service entrance, so that scenery need no longer be sawn in half before it can be brought into the building.

Front-of-house spaces have been replanned to make them lighter, larger and connect more coherently with Sloane Square. Incremental layers of internal plaster have been scraped back to reveal the original brickwork, fragments of tiling and mosaics. These gutsy, scarred remnants are simply left raw, as evocative evidence of the building's former incarnations.

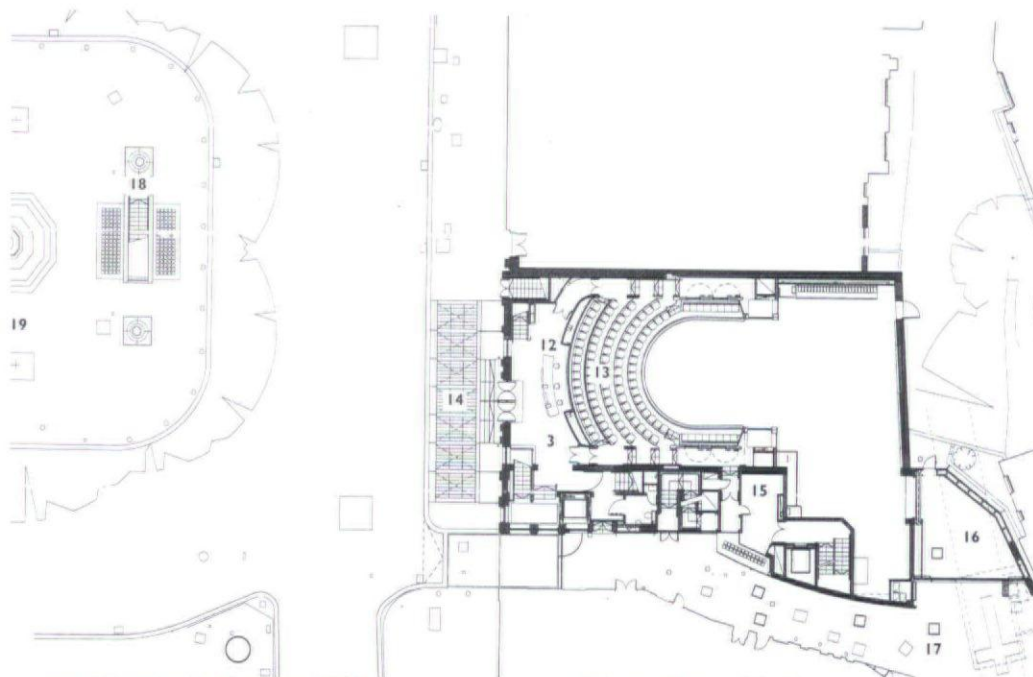
A curved three-storey drum encloses the outer wall of the remodelled auditorium, marking the threshold between the outside world and the inner sanctum of the theatre.

Coloured with layers of rich vermilion pigment by artist Antoni Malinowski, the surface of the drum subtly gleams and shimmers in different lights and is a constant reminder of the shrine-like presence of the theatre at the heart of the building. The auditorium has been reconfigured to improve sightlines. The original Victorian cast iron structure has been stripped back and exposed, its riveted, pitted hulk like a decaying ship's hull. Plump new seats in battered maroon leather reinforce a sense of dark, clubby intimacy.

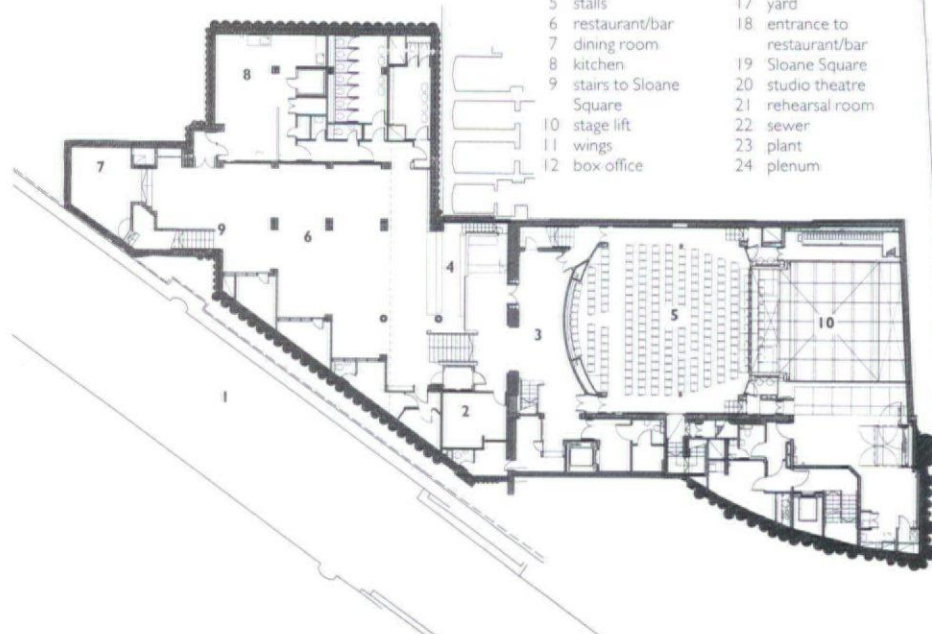
Back-of-house spaces have also been extensively improved. For the first time in the Royal Court's history, there is now wing space, including a carpentry



longitudinal section



ground floor plan (scale approx 1:500)



lower ground floor plan

- | | | | |
|----|-------------------------|----|----------------------------|
| 1 | Underground line | 13 | circle |
| 2 | office | 14 | glass pavement |
| 3 | foyer | 15 | stage door |
| 4 | servery | 16 | service entrance |
| 5 | stalls | 17 | yard |
| 6 | restaurant/bar | 18 | entrance to restaurant/bar |
| 7 | dining room | 19 | Sloane Square |
| 8 | kitchen | 20 | studio theatre |
| 9 | stairs to Sloane Square | 21 | rehearsal room |
| 10 | stage lift | 22 | sewer |
| 11 | wings | 23 | plant |
| 12 | box-office | 24 | plenum |

THEATRE, LONDON
ARCHITECT
HAWORTH TOMPKINS

4
The enlarged main foyer at ground floor level, with its original mosaic floor newly revealed.

5
Foyer on the first floor, dominated by the rich red drum of the auditorium. Incremental layers of plaster were carefully scraped off to expose crumbling, weathered brickwork.



workshop and scenery store. The fly tower has been underpinned, reinforced and extended upward and the stage is equipped with a hydraulic lift and new floor of untreated Jarrah timber.

The Theatre Upstairs (the Royal Court's smaller studio theatre) retains its modest, domestic feel, linked to the rest of the building by a main stair that shrinks in scale as it ascends, like a staircase in a private house. A new, higher hipped roof made of dark reclaimed timber adds space and conceals service ductwork, while a simple rostra seating system offers directors and designers a great range of staging options.

Additional front-of-house space has been created by tunnelling under the road outside to connect through with Sloane Square (an exceptionally complex feat of civil engineering that involved navigating around an Underground line and a main sewer). The new undercroft extends the existing stalls bar and houses a kitchen, restaurant, bar and small bookshop. Polished concrete and Venetian stucco line the bunker-like restaurant, which is also generally accessible to the public and looks set to become a lively new Chelsea meeting place. Pavement lights transmit a delicate luminance into the subterranean depths.

Balancing the demands of historical continuity and experimental innovation, Haworth Tompkins' intelligent remodelling echoes the essential spirit of the Royal Court; radical yet acutely sensitive, bold but rigorously pragmatic. Like a splendid moth emerging from its constricting, fusty cocoon, one of London's best loved cultural institutions has been gloriously reborn. C. S.

Architect

Haworth Tompkins, London

Structural engineer

Price & Myers

Services engineer

Max Fordham

Theatre consultant

Theatre Projects

Photographs

Andy Chopping





THEATRE, LONDON

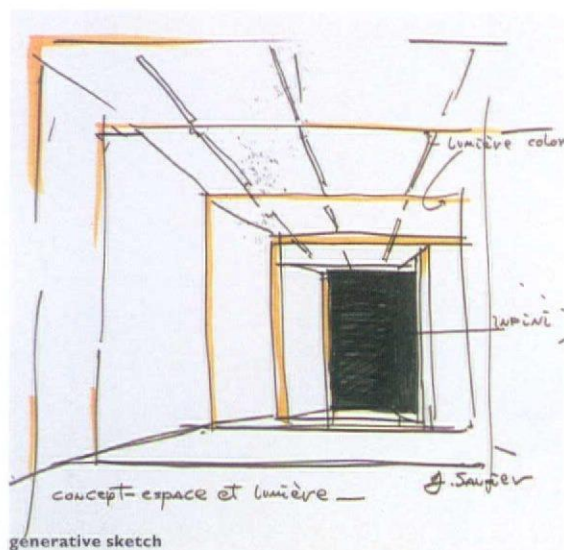
ARCHITECT

HAWORTH TOMPKINS

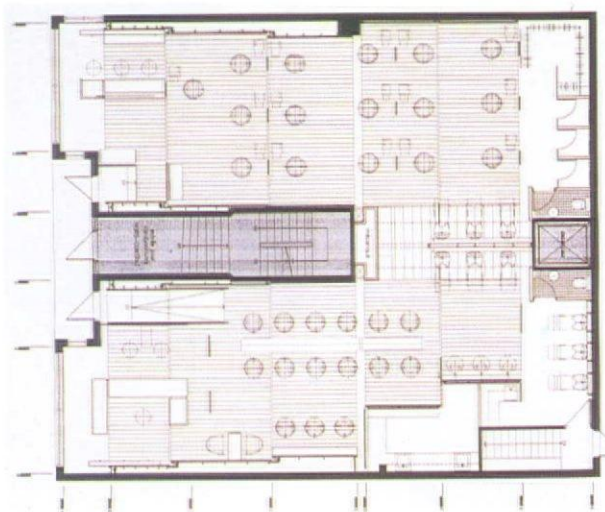
- 6
New dressing room, with sliding Cor-ten mesh screens, which provide privacy yet admit light.
- 7
Main staircase. Old and new parts meld together in a dialogue of rough-hewn materiality that explicitly reflects the building's many incarnations.
- 8
Main auditorium is a mysterious, submarine-like space, dominated by the now exposed Victorian cast iron structure. Plump seats in maroon leather reinforce the sense of drama and intimacy.
- 9
Carved into the space below Sloane Square is a new subterranean restaurant with austere polished concrete walls and dark timber floors.

Beauty clinic

Vivid colour, space-dissolving mirrors and spare economy of materials animate this hairdressing and beauty salon in Montreal.



generative sketch



ground floor plan (scale approx 1:125)

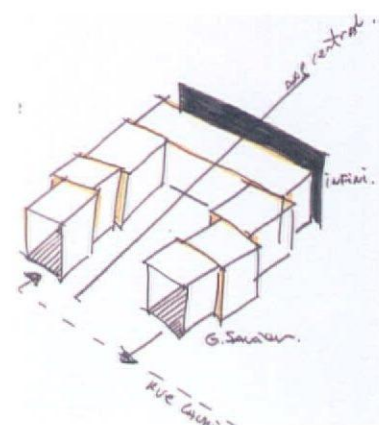
The design for *Orbite*, a beauty salon tucked into the ground floor of a new building on Laurier Street in Montreal contrasts the extrovert theatrical world of the hairdresser with a privacy more usual for a health clinic. By juxtaposing an existing imposed symmetry projected in the facade and plan of a new building with these two aspects of the programme, Saucier & Perrotte have imbued a modest interior design project with material and spatial significance.

The scheme enthusiastically adopts the austere qualities of an inherited building shell. As in the Cinémathèque Québécoise (AR August 1998), light shapes space. White walls predominate, but in one half of the salon they are telescoped in plan. Panels of mirror and glass are suspended within the space. Together with strips of coloured light set between the telescoped walls they create a series of places where both hairdresser and customer become conspicuous actors on a stage set of remarkable complexity and magic that is also forcefully projected into the street.

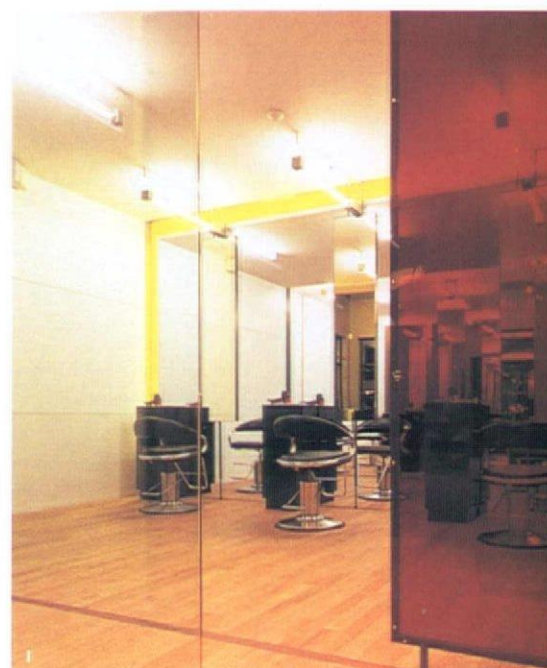
Alongside the place where hair is trimmed and teased, another is intended for more radical transformations. Screened by a series of translucent glazed screens and organized for privacy, it is in sharp contrast to the boldly upright hairdressers' chairs that put people on show. Light is manipulated to reflect off white surfaces ensuring that the faces and hands to be treated are clearly visible to the beautician, while keeping the identity of the customers discreetly away from public view.

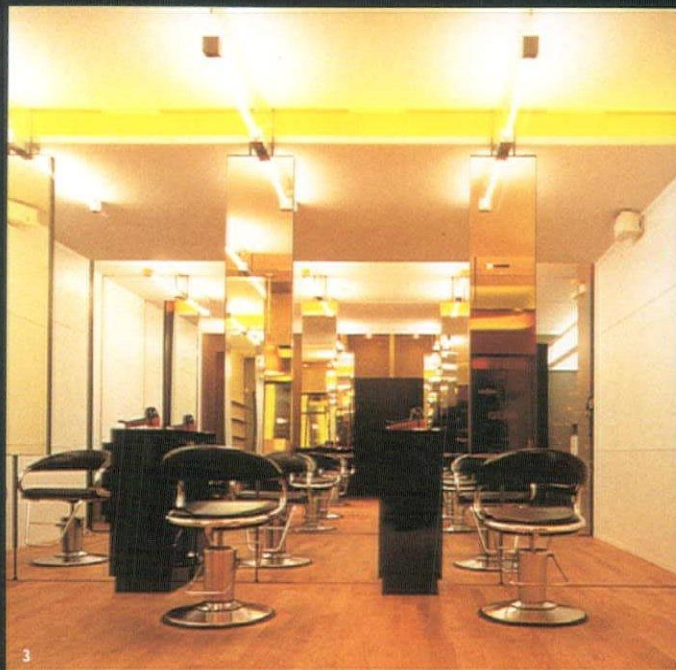
Detailing is minimal, in places to the point that it seems almost invisible. Fittings have the economical elegance of instruments, while the design of the lighting and use of different types of glass and colour create layers of transparency and translucence which impart a fitting sense of mystery and ephemerality. BRIAN CARTER

Architect
Saucier & Perrotte, Montreal
Photographs
Marc Cramer



generative sketch



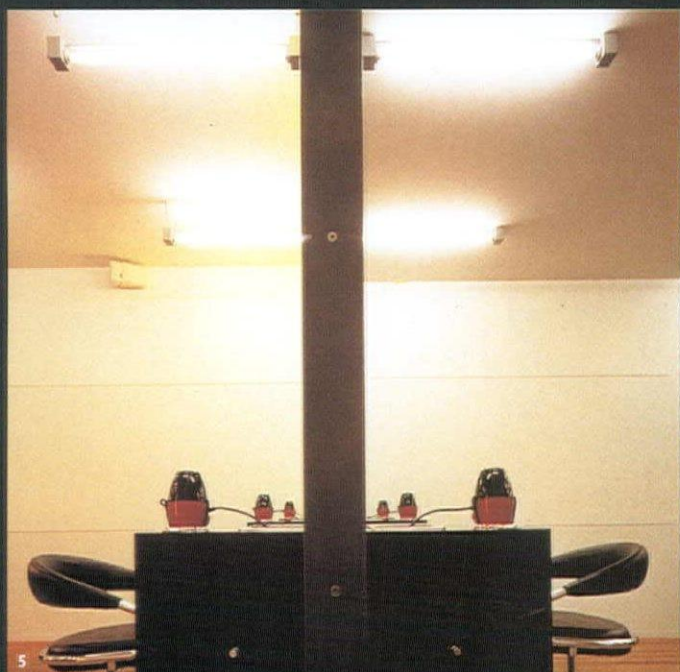
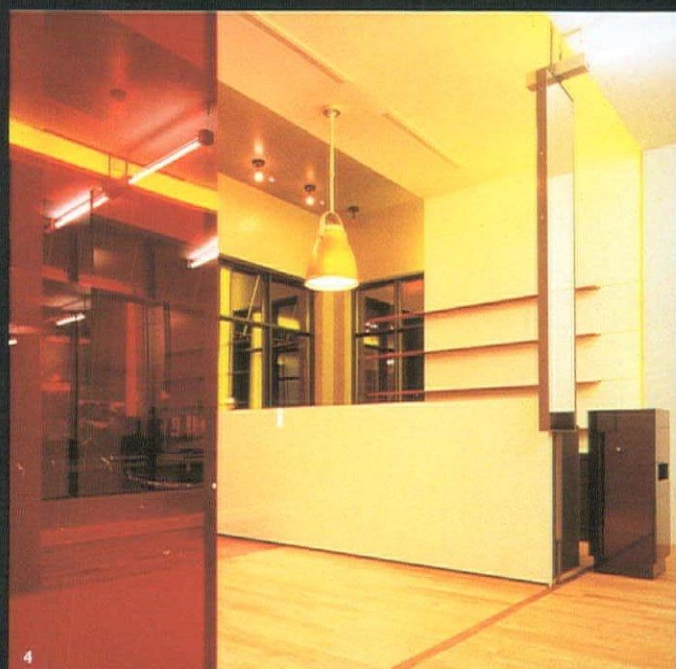


BEAUTY SALON, MONTREAL, CANADA

ARCHITECT

SAUCIER & PERROTTE

- 1 Screens of red and yellow glass filter light through the tall, calm interior.
- 2, 3 Mirrors create illusionistic effects, dissolving space.
- 4 Spare use of colour adds vivid flashes.
- 5 Detail of clinically minimal hairdressing booths; beauty as science.
- 6 Fixtures and fittings have the elegant economy of instruments.



HOUSE, WEST VANCOUVER, CANADA

ARCHITECT

PETER CARDEW ARCHITECTS

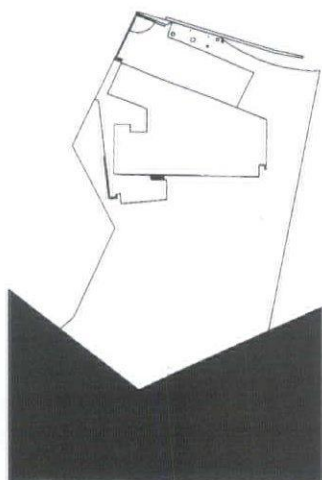
Designed to make the most of a wonderful site and view, this house is fundamentally one huge volume for a couple with particular wants.

On a steeply sloping south-facing site in West Vancouver, a house looks out over the ocean through a great glass wall which is almost like a huge window in the forest. Huge Douglas Firs and Hemlocks frame it. Designed for a couple aged about 60 who want to live in it for the rest of their lives, the house is arranged so that the main areas are more or less on the same level (though there are a few steps to emphasize for instance difference between hall and main living area). Guest rooms and accommodation for residential help (should that ever become necessary) are on an upper level at the west end and on a lower one at the east.

Approach is from the north, the top of the site. You arrive at a one-storey high concrete block wall, pretty non-committal and largely imperforate, but with a porch carved into it at an angle. From here, you come into a hall from where the luminous main living space draws you further into the plan. Before coming to the big volume

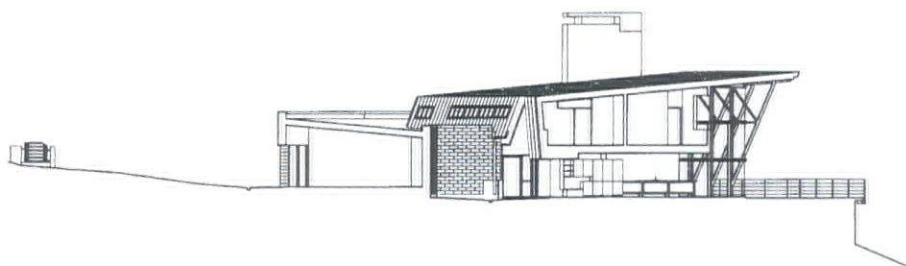
though, there is a cross corridor top lit by clerestory. Quickly, the reason for the twisted axis becomes clear. The north wall with its garages is roughly aligned with the road. But most of the rest of the plan takes its orientation from the great glass wall of the living room which is itself aligned to the slope and the magnificent view over the ocean.

The roof projects some 9ft (2.75m) from the plane of the huge window; the resulting overhang protects the volume from summer sun, yet lets winter sunshine warm the interior. Summer cross ventilation can be obtained through opening lights in the glass wall and the motorized panes of the clerestory. Thermally, the mass of the building is in the blocky part at the back of the site while the south half is light, either in glass or insulated metal siding. Materials are more durable and heavier than usual in houses of the area because the clients, for their last home, were prepared to pay about 50 per cent more than usual.

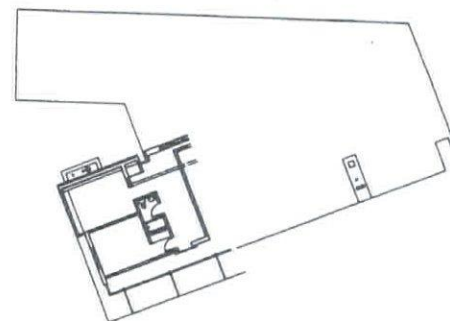
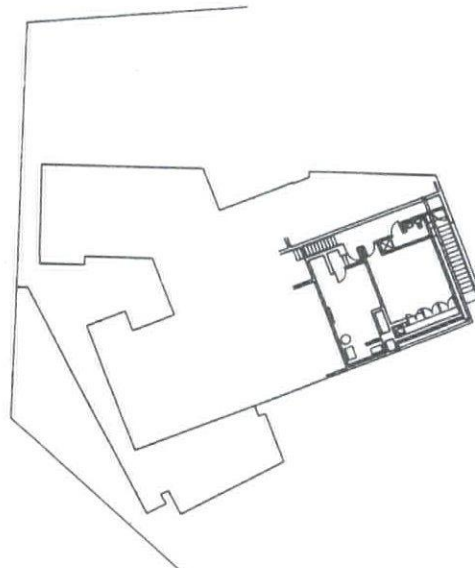
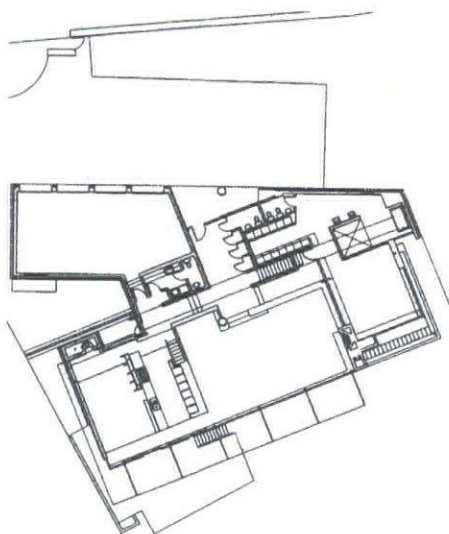


site plan

- 1 Privacy is given by the dense forest.
- 2 Inflected and non-committal entrance reveals other plan axis.
- 3,4 Huge glass wall is shaded by roof overhang.
- 5 Clerestory lit cross hall.



section through kitchen, terrace and upper level





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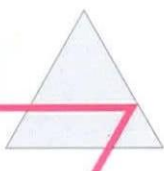
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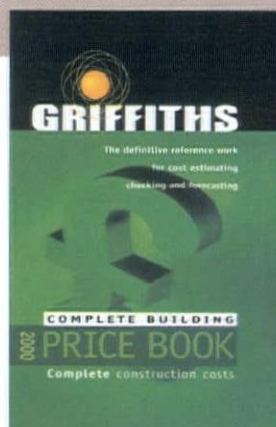


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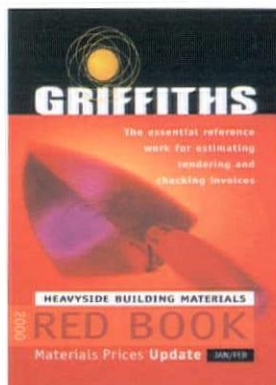
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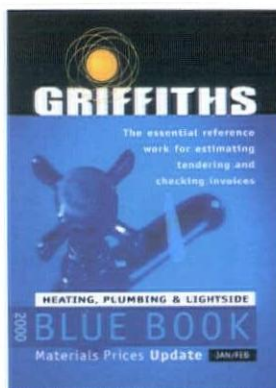
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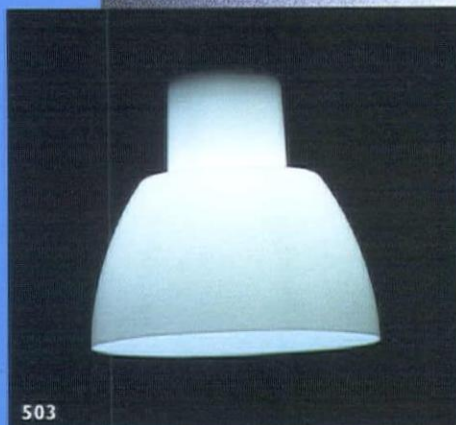




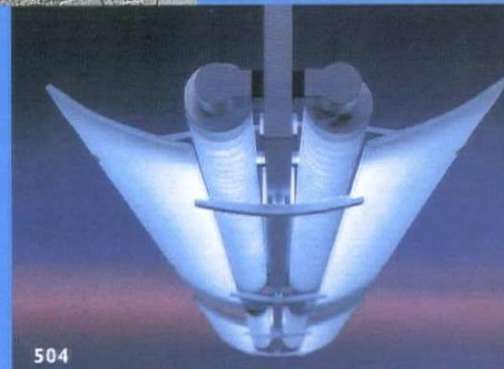
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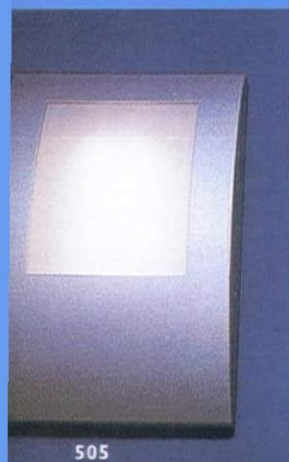
Fax: +39 071 7588 295

507 ARTEMIDE

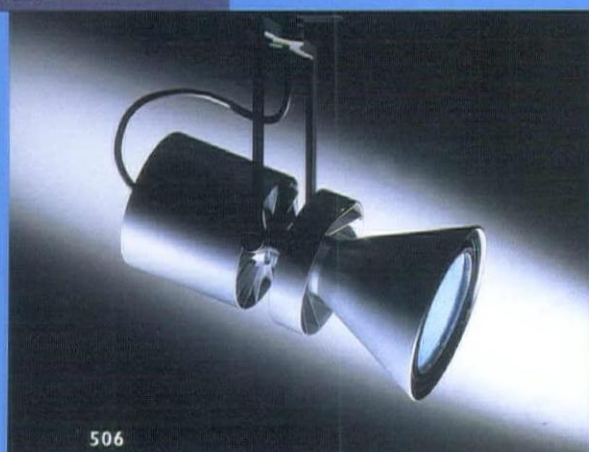
Megan System: mixed modular system of luminaires, by Ernest Gismondi, with fluorescent tubes emitting indirect light.

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Fax: +39 02 9359 0254



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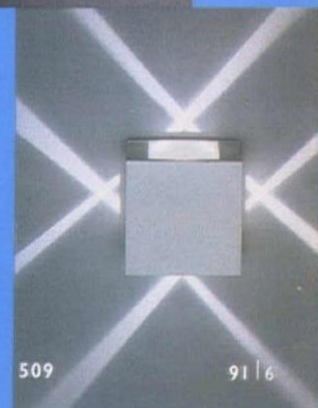
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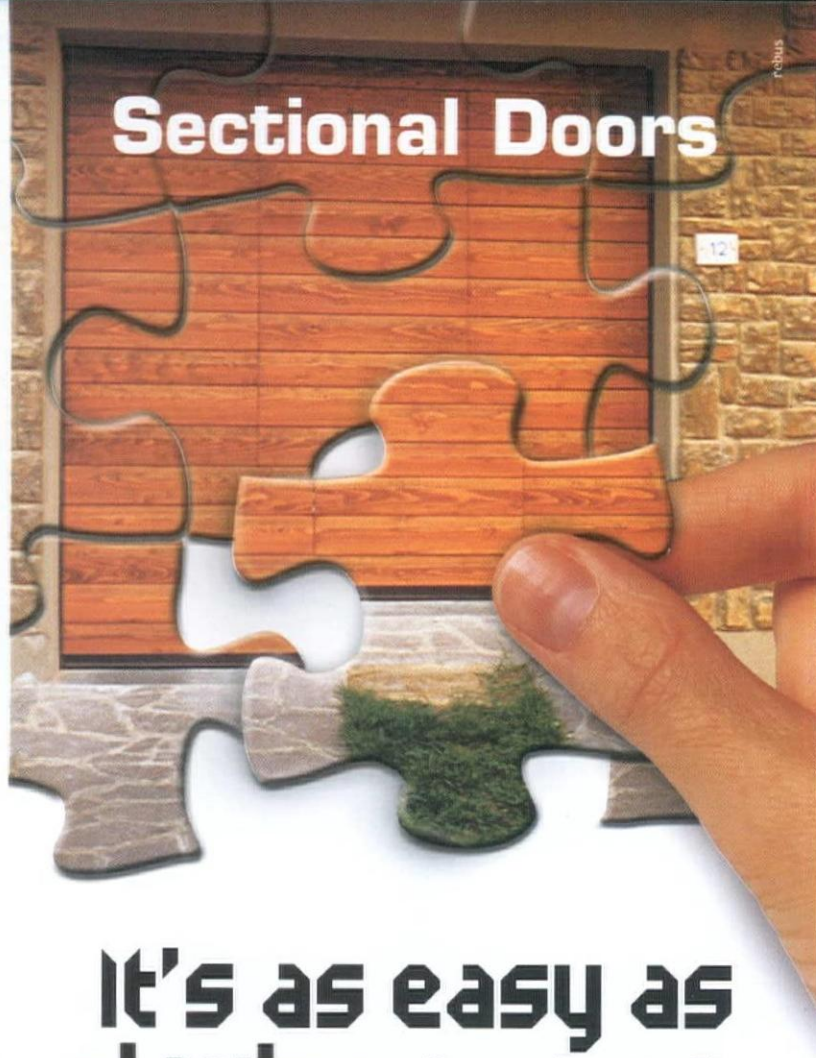
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Task

The task of the competition is the design of a masterplan for a virtual ETH-Campus.

ETH World

- creates an innovative platform,
- offers optimally structured information,
- is a forum for co-operation and transfer of knowledge,
- strengthens the ETH community,
- integrates the virtual and physical worlds.

It is expected that this competition will yield visions for a dynamic structure and the design of the net-presence as well as for the design of physical features.

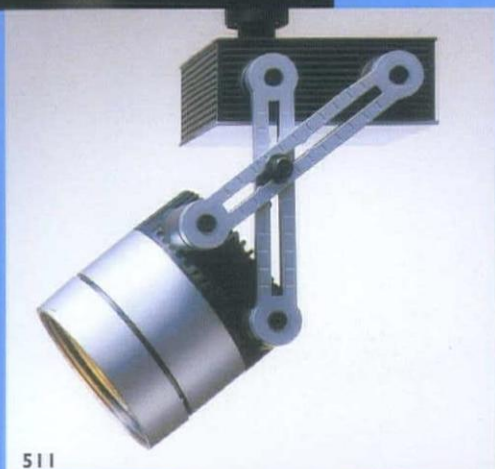
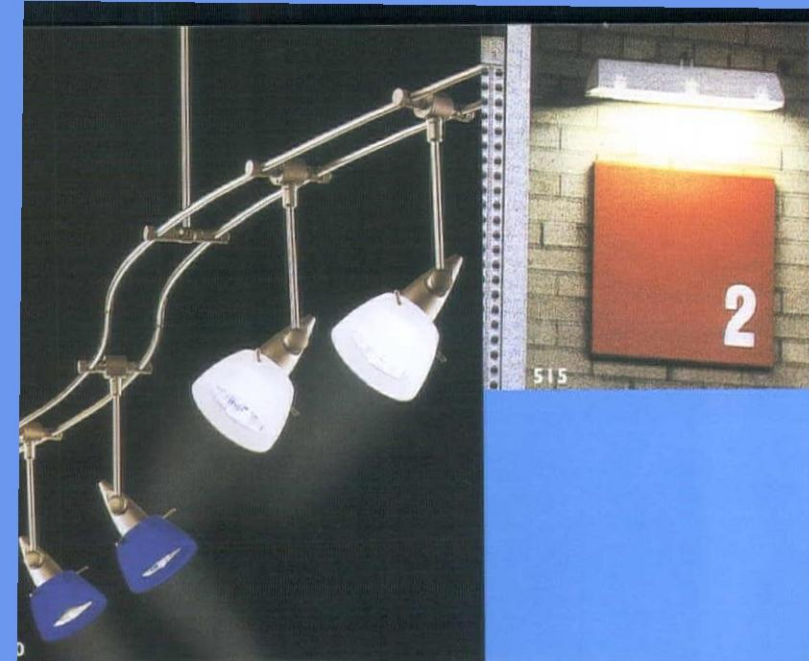
Procedure

The invitation to participate in this open worldwide two-phase competition is extended to interdisciplinary teams uniting architects, interface designers and communication researchers as well as to researchers in teaching methods, artists, computer scientists, marketing experts, film and theater directors, sociologists and IT-companies.

Further informationen

Task, competition documents, application, submission requirements, jury, prize money as well as deadlines can be found under www.ethworld.ch and www.phase1.de.

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514 LOUIS POULSEN

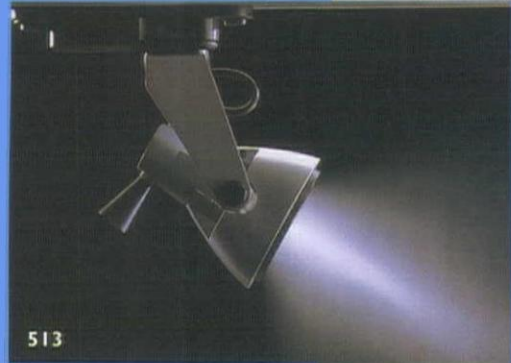
Nyhavn Maxi: luminaire by Alfred Homann, with shade in white or grey metal and variety of lamps.
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Fax: +45 33 31 03 04

515 FLOS

Boxer: robust luminaire for public places by Konstantin Gric.
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Fax: +39 0302438 250

516 LEHNER WERKMETALL

Bansin: exterior standard luminaire.
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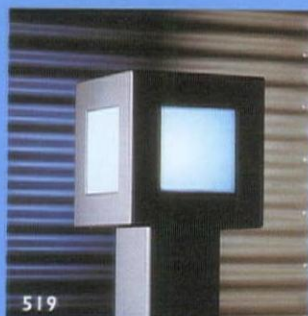


517 ANSORG

Ansorg's lighting design and fittings illuminates Vitra's new furniture showroom in Clerkenwell, London.
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Fax: +49 (0)7031-742 49-22

518 ERCO LIGHTING

Erco lighting the Blue Lagoon thermal baths, by Vinnustofa Arkitektka, in the Svartsengi lava fields, Iceland.
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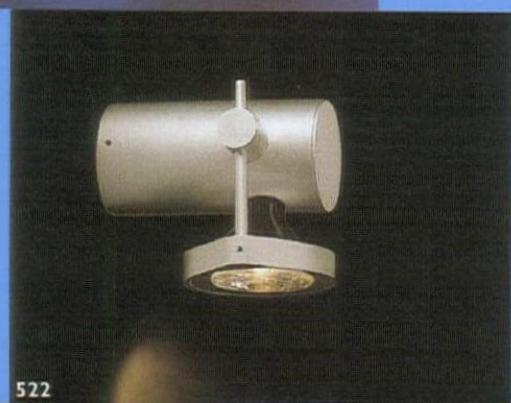
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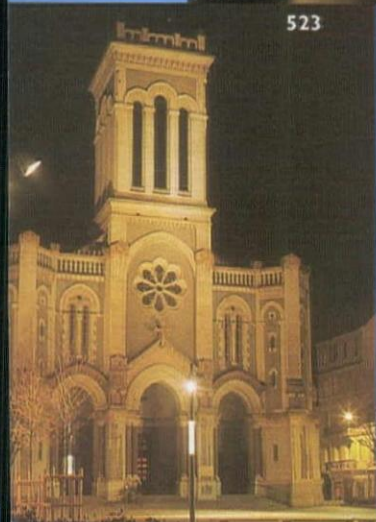
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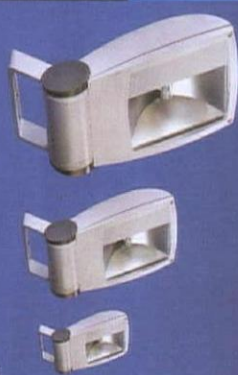
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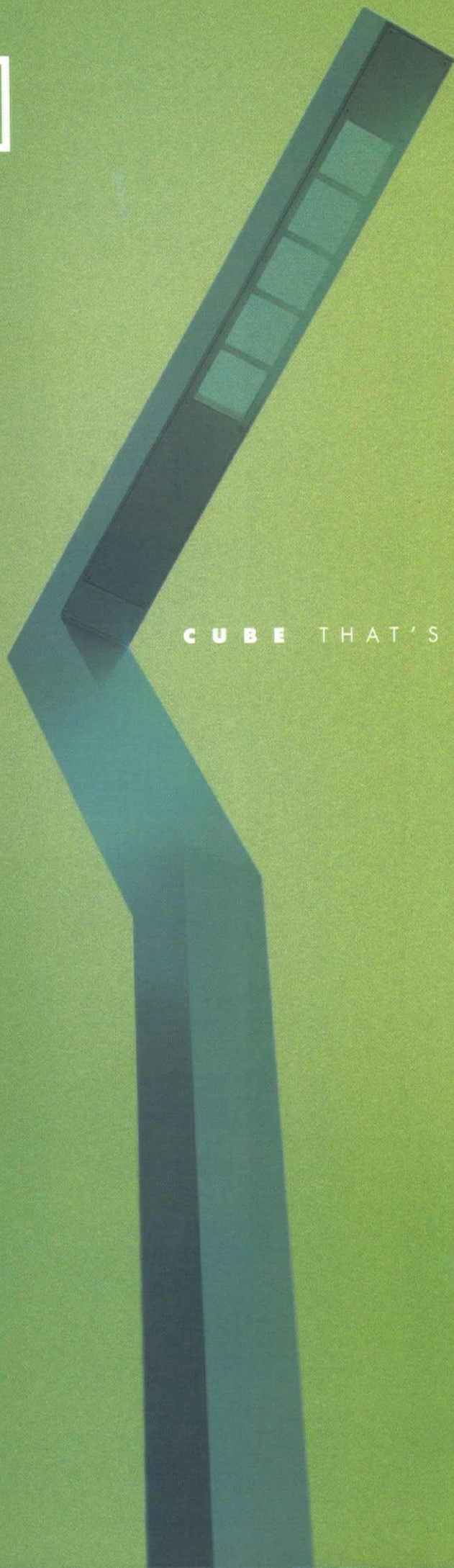
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SO-LONG SHORT TERMISM

LANDSCAPE: PATTERN, PERCEPTION AND PROCESS

By Simon Bell. London: E & FN Spon. 1999. £45

Worldwide, short-term profit-driven development is ignoring environmental and cultural costs (borne by taxpayers and users). However, advanced satellite imaging and software programmes offer tools with which to identify and reclaim damaged ecosystems and plan new landscapes.

Forester and landscape planner Simon Bell's thesis 'the patterns of the landscape reflect the long term processes which have created them' is used as a model for managing landscape change. He interweaves theories of aesthetics, visual perception, ethics, and sense of place, with geological evolution and human impacts over the ages. Drawing on previous authorities, much old ground is revisited. But Bell includes recent concepts and provides detailed descriptions of up-to-date design methods. These include useful matrices and systems to enable planning for the successful mosaic of complexity and diversity critical to the health not only of ecosystems, but also human aesthetic needs which he identifies.

In conclusion, this ecologically insightful book raises critical issues. How can political and legislative initiatives for protecting the environment be translated into more effective action using limited resources? How can sustainable issues and the involvement of people in the planning process be implemented? How can all the necessary related disciplines be constructively informed and involved? And particularly, how can we internalize the imperative for natural diversity and, integrate it in our drive for 'progress'? ELSA LEVISEUR

UNDERLYING OFFICES

THE EUROPEAN OFFICE

By Juriaan van Meel. Rotterdam: O10 Publishers. 2000. NLG49,50

Doctoral dissertations aren't supposed to be readable. Nor are they expected to be directly relevant to the real world, let alone to that highly specialized part of it we call architectural practice. Juriaan van Meel's beautifully produced and elegantly illustrated account of the underlying reasons for the differences between office design in the UK, Germany, Sweden, Italy and the Netherlands demonstrates, among many other things, that both these commonly held expectations can be completely wrong.

Juriaan van Meel trained as an architect at

the Technical University of Delft where he stayed on to conduct this research. The method adopted is a series of comparative case studies of typical building forms, floor plates and workplaces set in the context of a thorough comparative analysis of urban settings, market conditions, labour relations, culture and regulations in the five countries studied. The great advantage of the technique is that a strong sense of the diversity of European office design and business cultures quickly becomes apparent. Glib generalizations about working conditions, whether emerging from the European Commission or, for that matter, from Millbank Tower or from the Tory Central Office, can now be tested against a critical framework. Two complementary weaknesses emerge: there is not quite enough operational or social detail about the individual cases nor is there a complete, theoretical explanation of why the differences have emerged and how they are likely to develop.

Of course, that is asking rather a lot of a single dissertation. Karl Marx himself would have been hard put to defend himself on both counts. What heads of schools of architecture might be interested to observe is that this dissertation, written directly in clear, jargon-free English, is only one of a series of PhD dissertations on similar architectural subjects, carried out with comparable sophistication, now emerging from what has become the most impressive school of architecture I know, either in North America or Europe. What architects in practice will be delighted to discover is that architectural research, relevant to their day to day concerns, can it seems, at last, be conducted in a University, even if it has to be a Dutch Technical Institute. FRANCIS DUFFY

Francis Duffy acted as advisor and external examiner for TUD on Juriaan van Meel's dissertation.

GODWIN'S DELIGHTS

E. W. GODWIN: AESTHETIC MOVEMENT ARCHITECT AND DESIGNER

Edited by Susan Weber Soros. London: Yale University Press. 1999. £50

THE SECULAR FURNITURE OF E. W. GODWIN

By Susan Weber Soros. London: Yale University Press. 1999. £60

At the end of one (I forget which) of the V&A's two great exhibitions on Pugin and Morris, there was a small comparative section of work by other designers, including Edward Godwin's famous sideboard. After acres of overpowering detail and pattern, the relief of its dazzling simplicity was indescribable. Morris



E. W. Godwin's famous sideboard (1885-88). Japanese flavoured abstraction in one of the most famous of the works of the judicious eclectic now being re-evaluated.

and Pugin were both extraordinary men who exerted enormous influence, not always for the good; but in terms of pure design neither of them had Godwin's unique, if fitful, genius, his ability to make one sit up and jump, his gift for taking elements from the past, or from other cultures, and restating them in far more original and exciting ways than Pugin or Morris ever accomplished.

For 20 years or so Godwin suffered from becoming the property, so to speak, of two successive historians neither of whom produced the authoritative monograph which his admirers were hoping for. But these two new books, splendid in scale and quality of writing and production, do him justice at last. E. W. Godwin was brought out to accompany a big exhibition of his work in New York, an exhibition unforgivably turned down by the V&A. Different authors contribute articles on, among other topics, his work as architect, designer of interiors, furniture, wallpaper and ceramics, theatre designer, and prolific writer in the architectural magazines. The article on his furniture is by Susan Soros, and on a larger scale, her impressive catalogue covers and illustrates all, or virtually all, of his prolific work as a furniture designer.

At his death Godwin was dismissed in obituaries as a gifted failure. His architectural practice certainly petered out; like other gifted architects he was difficult to deal with, and his buildings did not always keep out the rain and the damp. But an architect who got at least 30 of his commissions built, including a batch of masterpieces, cannot be written off as a failure; and Susan Soros lists 426 furniture designs, the majority of which were put into production. Unlike Morris and Pugin, he did not have a burning gospel; he believed in a 'judicious eclecticism', and moved freely, and somewhat restlessly, from style to style and genre to genre; he lacked, perhaps, a consistent sense of direction. It is his Anglo-Japanese furniture which is the basis of his contemporary reputation as a 'pioneer of modern

design', but it is a mistake to look at it in isolation from his other work, which was not always simple (or, for that matter, successful), although a gift for simplification is apparent in all his various phases; it is arguable that his best work was done when he had least money to spend.

As a young man he was a Goth, and his particular brilliance is already evident in the knife-edge sharpness of his window-tracery in a church at Ditteridge, the bold simplicity of the little church built on the cheap at Grade, his robust Bristol warehouses and his grand little town hall at Congleton – arguably more successful than the more elaborate town hall at Northampton, the best feature of which is the chunkily creative Gothicism of the chairs in the Council Chamber. Then comes his romantic period, the seven years of his affair with Ellen Terry, their lovely little high roofed hideout in Hertfordshire, a towered house hidden in the woods for Lord Cowper, a walled kitchen garden or Camelot for cabbages at Castle Ashby, and a hill-top castle in Limerick, fortified against Fenians without, and a mixture of Japanese and Gothic within.

His break-up with Ellen Terry initiated his aesthetic period, his friendship with Whistler and Wilde, his most fruitful years as a furniture designer, and his studio houses in Tite Street, Chelsea, brilliant enough even after the abstract simplicity of the original designs had been mucked up by the Metropolitan Board of Works. Finally, in his last years, he devoted himself almost entirely to the theatre, most memorably perhaps in his two Greek productions, especially *The Faithful Shepherdess*, a magical evocation of Arcadia in the Surrey woods, with a Greek chariot pulled by splendidly-caparisoned oxen and a colossal statue of Pan, round which (as a faded photograph shows) the chorus circled in a way reminiscent of the Italian students dancing in a ring round Jim Stirling at the Venice Biennale in 1991.

The various periods in all their variety are fully covered in the two volumes under review, and even those already acquainted with his work will find them full of new delights and surprises.

MARK GIROUARD

Nevertheless, he and his colleagues at the University of the West of England proceed to indulge in it: by trying to define more clearly what we mean by community and neighbourhood, by weighing up whether 'communities of place' are still valid in a world where place means less and less, and by concluding that they are, and indeed must be if we are to take sustainability seriously.

The book is not just a polemic. It examines the practical application of these ideas to the many conflicting facets of everyday life whether we live in the city or in the back of beyond – how we let ourselves be governed (when we should govern ourselves in smaller more governable communities), how we rely on the car quite needlessly (but would not need to if working/living/social patterns were different), how we expect to be supplied with endless energy (when we could use less and even generate it ourselves), how we use supermarkets to supply us with food from all across the world (when we could be growing it ourselves). Other issues discussed are optimum densities in cities, the physical attributes of neighbourhoods, local movement systems, the neighbourhood as ecosystem, to list but a few. There is also a very full bibliography and a list of eco-neighbourhoods world-wide, with brief

descriptions, contact names, website addresses and so on. All very useful.

The shifting of hearts and minds is the big problem, of course. If transport-related energy consumption is the real guzzler, what will curb our use of the car? Hugh Barton suggests that promoting sustainability under the banner of health would give the issue better emotive appeal. Maybe, but I fear our individual and collective health has to get far worse before we lose our dependence on our cars.

ADAM VOELCKER

WAFFLING INTO THE MOUND

DUTCHTOWN: A CITY CENTRE DESIGN BY OMA/REM KOOLHAAS

By Michelle Provoost, Bernard Colenbrander, Floris Alkemade. Amsterdam: NAI Publishers. 1999. HFL55,00

The Dutch town of Almere was planned from the late 1960s on a true *tabula rasa* on the reclaimed Flever Polder to the east of Amsterdam. Three residential areas were soon established, each based on a different urban theme, but until recently there was no plan for the town centre. This booklet accompanied an exhibition held at the Netherlands Architecture Institute, which described how a public authority brought together (with, apparently, much gnashing of teeth all round) the Koolhaas office and the Dutch developer MAB: the latter desperately defending its not unreasonable aim of creating a pleasant residential environment, and the former trumpeting its disgust for anything bourgeois at every opportunity.

It's a useful little book, providing a valuable guide to a debate about public space in Holland which is both visionary and realistic. The architectural waffle is, however, frightful. The OMA proposal comprises a concentration of tower blocks and a curved mound of earth covering a car park with shops on top. This car park is presented in heroic terms, and is variously described with expressions such as *Espace Piranesien* and a playing field for the contemporary urbanite, although there is no reason here to suppose that there is anything that distinguishes it from any other underground car park. There is indeed no evidence that any of their design is based on anything but visual gesturing. This waving of inflated texts to describe what appear to be banalities, these concept models and these dead-blank computer renderings fall, in my opinion, into the category of irritating pretentious rubbish.

TIMOTHY BRITTAIN-CATLIN



Model of Founder's Room ceiling in the Walt Disney Concert Hall, Los Angeles (1987-). From *Gehry Talks: Architecture and Process*, Rizzoli, New York, 1999, £ 39.95. Gehry discusses 33 of his projects from the last decade, with his own revealing notes and sketches as well as the usual gorgeous photographs (a few more conventional plans and sections would have been useful though). An excellent, concise, perceptive and witty introduction sets the scene. An essential guidebook to one of the gurus of the age.

SUSPECT ACTIVITIES

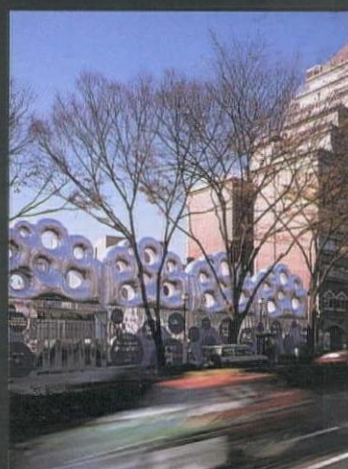
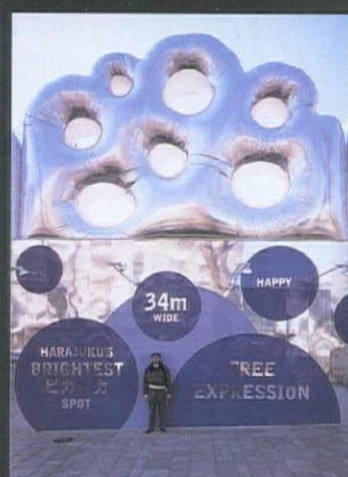
SUSTAINABLE COMMUNITIES – THE POTENTIAL FOR ECO-NEIGHBOURHOODS

Edited by Hugh Barton. London: Earthscan Publications. 2000. £17.95

Fostering community, once believed possible and then later discredited, may be back in fashion in the new clothes of sustainability. As Hugh Barton says in this absorbing book, 'planning neighbourhoods is a suspect activity'.

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delight



Photographs: Katsuhisa Kida

MADE FROM SEDUCTIVELY SHINY BALLOON FABRIC, THIS SURREAL INFLATABLE HOARDING ON A TOKYO BUILDING SITE WITTLY REDEFINES THE NOTION OF SUCH TEMPORARY STRUCTURES AND HAS BECOME A LOCAL LANDMARK.

Dirty and disregarded, the humble site hoarding is generally a source of inconvenience and annoyance to passers-by. But during its short lifespan, Klein Dytham's marvellously surreal inflatable hoarding has seduced collective imagination. Located on Omotesando, Tokyo's version of the Champs Elysées, the structure was designed to enclose a site during the demolition of an existing building and six months of ground works. Veloqx, Klein Dytham's property developer client, was making its debut in Tokyo and wanted something especially eye-catching to draw attention to its activities.

With television screens on every corner and the omnipresent blare of neon, getting noticed in Tokyo is not easy. Yet Klein Dytham have succeeded through a combination of inventive pragmatism and wit. Like some mutant organism about to invade Tokyo, the extraordinary

inflatable structure oozes over the top of the painted timber hoarding. Initially the idea of a moveable wall that could inflate and deflate was explored, but because of the potential for wear and tear, a static solution was developed. Fabricated by an English balloon manufacturer, the inflatable wall is made of extremely strong, lightweight, silver fabric used in balloons intended for round-the-world endurance journeys.

Even in sensation-saturated Tokyo, the hoarding has generated considerable public interest through enthusiastic press and television coverage. People slow their cars down to get a better look, passers-by stop and stare and the inflatable wall has become something of a local landmark. It is a far and delightfully welcome cry from the grimness and grime usually associated with building sites.

CATHERINE SLESSOR