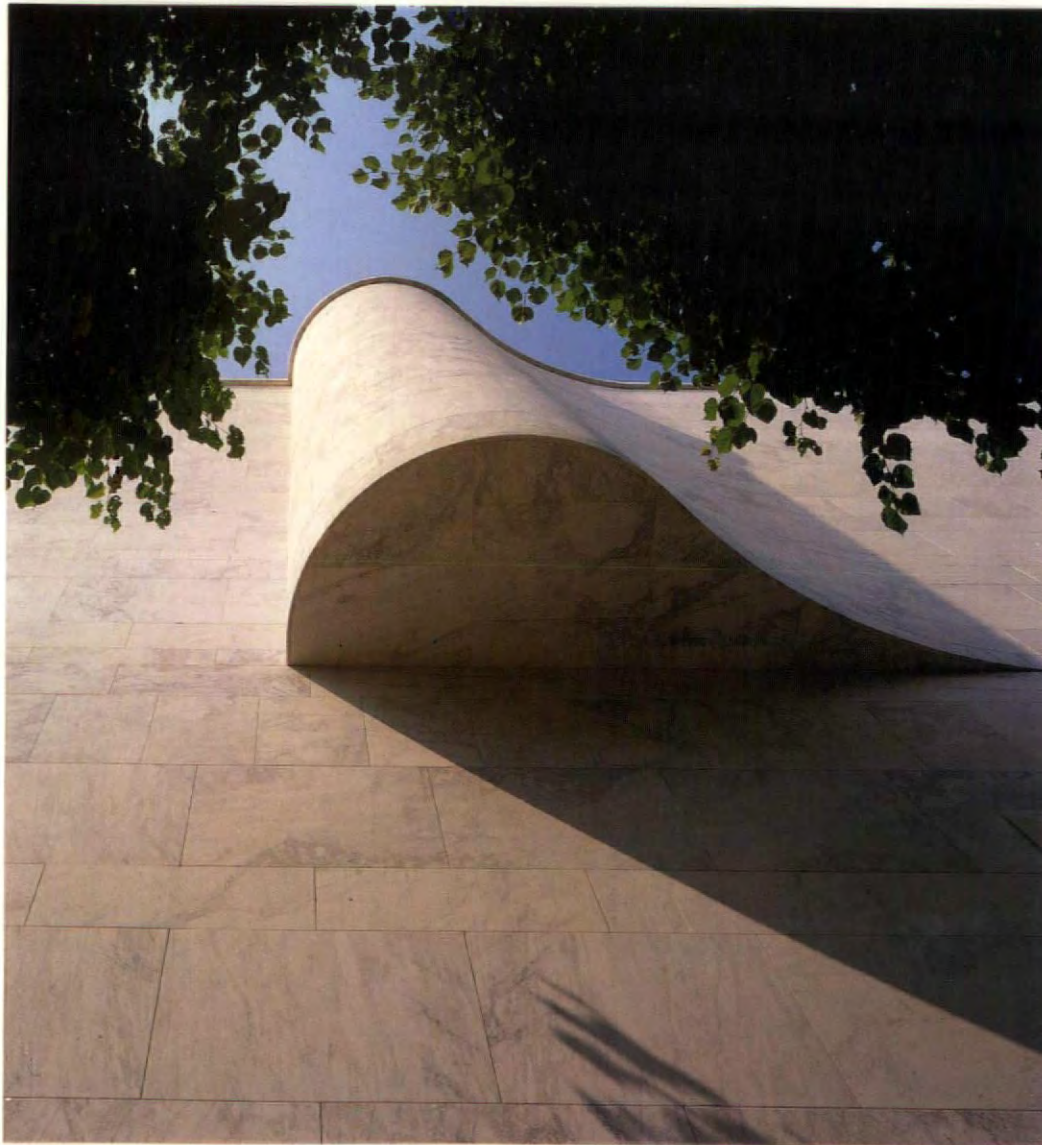


WORLD ARCHITECTURE

ISSUE No. 10 \$10 US £6 UK



GUSTAV PEICHL

EGYPT'S LIBRARY REBORN
ELLIS ISLAND REFURBISHED
DANGEROUS GERMAN ARCHITECTS

I.M.
—
LII

THE INTERNATIONAL ACADEMY OF ARCHITECTURE

Functional Architecture.

O&K/KONE
escalators and
autowalks.
In more than
80 countries
around the world.

Spanning space and heights. - O&K/KONE passenger transport systems are more than functional building elements. They direct the flow of passengers and contribute towards architectonics. Escalators, autowalks and lifts by O&K and KONE are a safe and comfortable way to travel for customers and personnel, visitors and guests, tenants and tourists. Outstanding design and technical quality have made O&K and KONE trademarks known throughout the world.



**PEI COBB FREED & PARTNERS
LIBRARY**

PEI Cobb Freed & Partners, Inc. Germany
Fax (23 24) 20 52 15, Telex 8 229 971

DEMCO

O&K/KONE
Escalators & Autowalks



WORLD ARCHITECTURE

THE OFFICIAL MAGAZINE OF THE INTERNATIONAL ACADEMY OF ARCHITECTURE (IAA) VOLUME 2 NO 6
EDITORIAL BOARD: PIERRE VAGO (CHAIRMAN); CARL AUBOCK; VYACHESLAV GLAZYCHEV; DENNIS SHARP;
GEORGI STOILOV

Consultant Editor

Sir Norman Foster

Executive Editor

Dennis Sharp

Associate Editor

Peter Dormer

Managing Editor

Jeremy Myerson

Art Director

Rob Norridge

Production Editor

Kathryn Walker

Account Director

Michael Delaney

Sales Manager

Paul Townsend

Production Coordinator

Michele Smith

Production Manager

Sally Banner

Circulation

Laura Goldthorpe

WORLD ARCHITECTURE

is produced by Design Intermedia and published by Grosvenor Press International Ltd. The views expressed in World Architecture do not necessarily reflect those of Grosvenor Press International or the International Academy of Architecture

All editorial matter should be addressed to: Dennis Sharp, Executive Editor, World Architecture, c/o Design Intermedia, Second Floor, 32-34 Great Marlborough Street, London W1V 1HA, England. Tel: 071-494 2675. Fax: 071-287 2571.

All advertising and subscription enquiries to: Grosvenor Press International, Holford Mews, Cruikshank Street, London WC1X 9HD, England. Tel: 071-278 3000. Fax: 071-278 1674.

© Grosvenor Press International Ltd 1991
All rights of reproduction reserved

RATES:
UK rate: £6 + £3 post & packing.
US \$10 plus \$5 post & packing.
Elsewhere prices inclusive of post & packing in local currencies are as follows:
Subscriptions of six copies are available for the price of five, that is, five times the local currency rate shown below
AUSTRALIA A\$17
AUSTRIA S197
BELGIUM F585
CANADA \$18
DENMARK Kr108
FRANCE 95F
HONG KONG HK\$117
IRELAND Ir£22
ITALY Lit20322
JAPAN ¥1908
MALAYSIA M\$41
NETHERLANDS 32F
NORWAY KR100
PORTUGAL E2280
SINGAPORE S\$29
SPAIN P1740
SWEDEN KR95
WEST GERMANY DM28
STUDENT RATES:
US \$6 + \$2 p&p or
£3.50 + £1 p&p. Only bankers drafts accepted with proof of student status.

World Architecture is published bi-monthly (6 times a year) by Grosvenor Press International Ltd. Subscription is US\$60 per year. Second Class Pending at Newark, N.J.
ISSN 0950-9798
Postmaster send address corrections to World Architecture, c/o Virgin Mailing & Distribution, Virgin Atlantic Cargo Building, 150 Newark International Airport, Newark, New Jersey 07114 USA

Cover	Städel Museum extension, Frankfurt, designed by Gustav Peichl, 1990.	
Editorial	Dennis Sharp on the architecture of technology.	27
Profile	Gustav Peichl Artist of the Technical. August Sarnitz outlines the counterbalance of art and science, intuition and function in Austria's leading modern architect.	28
	Homo Europensis. Peichl's language of composition discussed by Aldo Aymonino.	38
	Creating Useful Art. Gustav Peichl provides an insight into his design methodology...	44
	Back to the Future... and explains how history can redefine the architect.	46
	The Ironies of Ironimus. Peichl's contradictory alter ego as a prolific cartoonist satirising the contemporary building scene is examined by Louis Hellman.	50
Essay	Civilising Artefacts. Peter Dormer and Chloe Colchester look at the Viennese craft tradition as developed by architect and designer Carl Aubock.	54
Project	Seat of Learning. Plans to rebuild the ancient Library at Alexandria in Egypt.	58
Interiors	Manhattan Transfer. The honest refurbishment of Ellis Island has avoided a theme-park approach to an American national shrine.	62
Concept	Dangerous Architects. The International Forum of Young Architects looks at the work of Paul Werr and Siegrun Reuter of Frankfurt.	68
Interiors	Tokyo's new museum space by Mario Botta;	78
Innovation	London's high-tech Imagination building.	
Books	Church architecture; Frank Lloyd Wright; Ralph Erskine; the Independent Group.	80
Obituary	Past Modern. Dennis Sharp pays tribute to Berthold Lubetkin (1901-1990).	84
Polemic	Who is Tomorrow's Architect? Pierre Vago on the need to rethink professional training.	85

KEEPING ARCHITECTURE IN SUSPENSE – [®]TREVIRA HIGH TENACITY

Nowadays there is a growing demand to achieve more with less. Has this resulted in a greater understanding among architects and a new approach towards construction? Textile structures give this question another dimension.

The possibilities for large coated fabric structures were first demonstrated in 1967 by Frei Otto and Rolf Gutbord with their designs for the German pavillion in Montreal.

This type of architecture is unmatched. Its immediate advantages are obvious. No other structure can achieve so much. The need for materials and energy to cover such large areas is reduced.

Temporary buildings present hardly any environmental problems, and do not require



extensive foundations. They can be reused, making them both economically and ecologically viable. But it is their durability that offers the grea-

test prospects for the future. Shorter construction times, reduced costs and quality compatible with modern urban construction requirements go hand in hand with a life expectancy well in excess of just a single generation.

TREVIRA HIGH TENACITY fabrics satisfy the strictest safety requirements. Weight for weight they are stronger than steel, and a one metre wide strip can carry a load of 15 tonnes. Hoechst High Chem provides the innovation for new ideas extending beyond the world of architecture, leading to a better understanding of mankind and his environment.

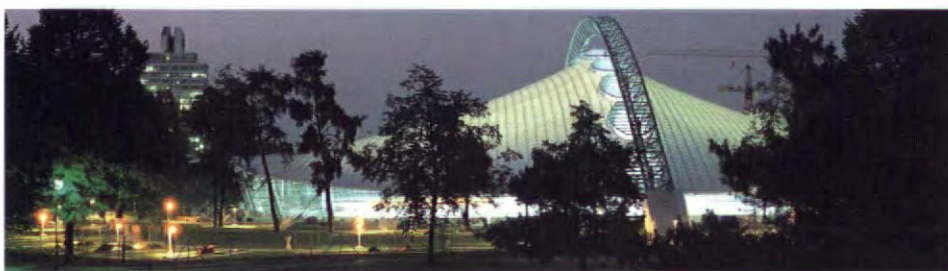


TREVIRA HIGH TENACITY is more than just a brand name. After more than 30 years of use in industrial textiles it has become a symbol of tried and tested quality.



Europe's biggest exhibition of the year – the Federal Garden Show '89 in the centre of Frankfurt took place in some 50 textile structures, the perfect environmental answer for this major event.

Eight fabric roofs spanning 140 m provided the setting for the World Expo '89 in Brisbane – the highlight of Australia's 200th anniversary – another world record for TREVIRA HIGH TENACITY.



Close to the Munich Olympic Park, this covered leisure area is open for skaters all the year round, and its architecture blends perfectly with its surroundings.

The aircraft maintenance hangar constructed for German Wings in Munich proves that functional buildings can still possess outstanding aesthetic qualities.



The historic stands were retained at the Lords cricket ground in London after seating on three levels were constructed above then covered by TREVIRA HIGH TENACITY.



NACO SUNBREAKER: AN INTELLIGENT ANSWER TO SUNLIGHT

Whenever you have the problem of controlling sunlight, NACO proposes an adjustable or fixed sunbreaker with aluminium blades of 15, 21, 30 and 45 cm width.

The NACO sunbreaker is available in different colours, it is easy to assemble and does not need maintenance.

For more than 30 years the adjustable NACO sunbreaker has had much success all over the world thanks to its manyfold use, functional working and great structural elegance.

ENRICO SEGRE

naco
PILLAR NACO ITALY

00198 ROME (ITALY)
Corso d'Italia, 35/B
Phone (06) 84.15.766 - 88.42.136
Telex 626433 NACORM
Telegr. NACOLITE
Telefax (06) 88.45.197

A MEMBER OF RTZ-PILLAR



NACO CHANNELS: THE BACKBONE OF THE ADJUSTABLE SHUTTER



In Italy, in Europe and throughout the world, NACO is synonymous with a shutter with adjustable blades because NACO manufactures the basic element of the shutter: the channel with the clips.

NACO thus continues the shutter tradition, renews it in its materials, gives it new functions and makes it totally adjustable. On the left hand you see NACO SP-54 with special blades of extruded aluminium or plastic, with rubber joints.

On the right hand you see NACO PL-60: traditional blades with all their charm, their elegant design and the warmth of the wood. Respecting classical taste, NACO SP-54 and PL-60 allow an easy regulation of light intensity, a perfect ventilation and the exclusion of rain, dust and noise.

**Throughout the world NACO
stands for adjustable shutters.**

naco
PILLAR NACO ITALY

00198 ROME (ITALY)
Corso d'Italia, 35/B
Phone (06) 84.15.766 - 88.42.136
Telex 626433 NACORM
Telegr. NACOLITE
Telefax (06) 88.45.197

A MEMBER OF RTZ-PILLAR

A large-scale photograph of a modern building's glass and steel framework. A worker in a blue uniform stands on a white mobile platform, working on the upper levels of the structure. The sky is visible through the glass panels.

We make sure that your building stays clean. Zarges.

Don't you agree that the travelling gear fits into its surroundings well?

That's the aim of our design engineers – to create travelling gear which is both economic and absolutely safe but which will not spoil the appearance of a building.

Whether you are interested in travelling gear for external installation or, later, for cleaning and maintenance purposes, don't hesitate to get in touch with us. You can rely on our international experience in this field.

Zarges – for top quality in light engineering.

Head office:
Federal Republic of Germany
ZARGES LEICHTBAU GMBH
D-8120 Weilheim
Department: SKV
Tel.: 08 81/6 87-2 45. Telex: (17) 881800
Fax: 08 81/6 87-2 81

Austria
ZARGES-LEICHTMETALLBAU Ges.m.b.H.
Leberstraße 96, A-1110 Wien
Tel.: (222) 74 15 53. Telex: 131168
Fax: (222) 74 83 25

France
ZARGAL S.a.r.l. 30, rue de la Gare,
Duppigheim
F-67120 Molsheim
Tel.: (88) 50 82 07. Telex: 890621
Fax: (88) 49 10 43

G.B. + North Ireland
KOBI CRADLES LIMITED
Oriental Road, Silvertown
London E16 2BS
Tel.: 071-474 34 64. Telex: 291450 KOBI G
Fax: 071-511 23 06 (Group 3)

USA, Canada, Mexico
VERTA Corporation, Scaffold
Systems Division
Headquarters: 10921 Valley
View Road Eden Prairie,
Minnesota 55344
Tel.: (612) 944-05 16. Fax: (612) 944-68 99

Hong Kong
Hutchison Building Materials Ltd.
1st Floor, Cavendish Centre 23
Yip Hing Street
Wong Chuk Hang, Hong Kong
Telex: 73147 DABO HX
Fax: (852) 5-8730625
Tel.: (852) 5-554555



ZARGES

Handles With Care Baldwin uses extra care to produce the world's finest solid brass hardware. Care of detail. Care of quality. And care of design. Crafted by their unique hot forged process, Baldwin creates lock sets that are designed to give you maximum home security. Solid brass knobs and levers give entrances that sought after custom look. And since Baldwin Hardware comes in a variety of finishes, a wide range of styles and design elements, you can create your own door treatments. Just ask us. We're there to handle your needs with care.



BALDWIN[®]

WHERE DESIGN AND QUALITY CREATE AN AMERICAN TRADITION

You can find Baldwin Hardware through fine showrooms located in:

BAHAMAS

Nassau

BERMUDA

Hamilton

COLOMBIA

Bogota

COSTA RICA

San Jose

DOMINICAN REPUBLIC

Santo Domingo

HONG KONG

Hong Kong, Kowloon

INDONESIA

Jakarta

JAPAN

Tokyo

PHILIPPINES

Manila

SINGAPORE

Singapore

SOUTH KOREA

Seoul

TAIWAN

Taipei

THAILAND

Bangkok

Also in major markets throughout the **U.S.A.** and **CANADA.**

For more information contact:

BALDWIN HARDWARE CORP. • 841 E. WYOMISSING BLVD. • READING, PA 19612 U.S.A. • (215) 777-7811



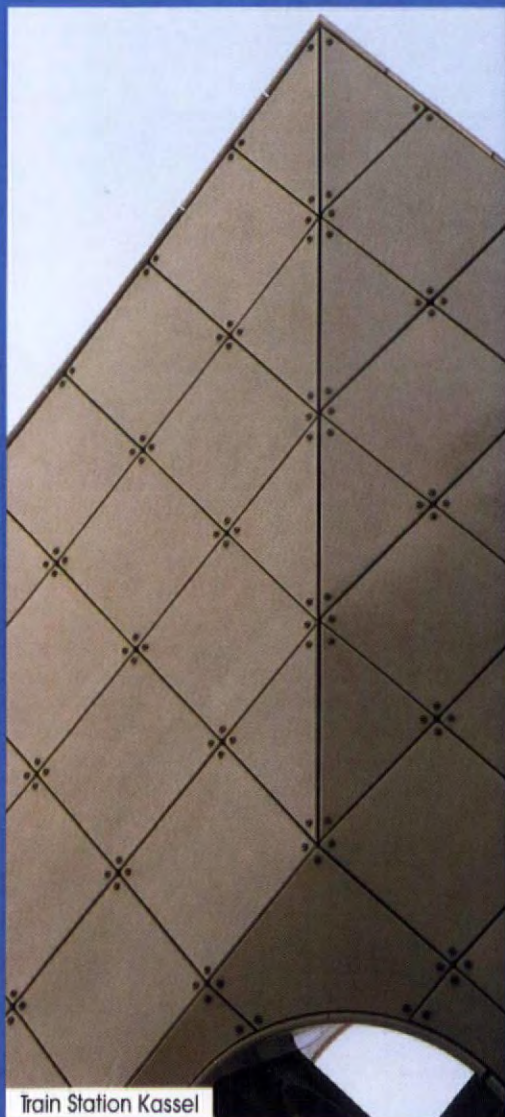
Parc La Vilette

We from EurEmalco are to be situated among the world leaders of ambitious enamelling in the building trade and the high quality architectural enamelling. You can ask for our catalogue if you would like to know more about us and the products we make.

Besides, if you should be interested in representing our company as one of our foreign agents, do not hesitate and contact us!



National Mosque Kuala Lumpur



Train Station Kassel



Shah Alam Mosque Kuala Lumpur



Head Sales Office
Mühlgasse 12
D-7630 Lahr / Germany
Tel. (0 78 21) 2 10 96-98
Fax (0 78 21) 2 10 99

High profile.

Gianfranco Frattini



Serie Otto F in ottone e radica

Le maniglie Fusital
sono disegnate,
oltre che da
Gianfranco Frattini,
anche da:
Gae Aulenti
Mario Bellini
Cini Boeri
Achille Castiglioni
Gregotti Associati
Vico Magistretti
Sottsass Associati
Marco Zanuso.

Le maniglie Fusital:
design d'autore.



Fusital
DESIGN D'AUTORE

VCRINTERNATIONAL S.r.l.
20055 Renate (Mi) Italy
Telefono 0362-982260
Telex 322192 VCRINT I
Telefax 0362-924455

Show-room:
Milano - Via Sant'Andrea, 8
Telefono 02-795574
Firenze - Via Felice Fontana, 53
Telefono 055-351217

AUSTRIA - SVIZZERA
Valli & Colombo Gesellschaft m.b.H.
Tel (0662) 661746/7
Telefax (0662) 662024

GERMANY
Valli & Colombo GmbH & Co. KG.
Tel (07063) 7035
Telefax (07063) 6623

BENELUX - FRANCE
Valli & Colombo N.V.
Tel (03) 4573517
Tel à partir de la France
19 (32) 34573517
Telefax (03) 4570828

GREAT BRITAIN
Valli & Colombo Ltd.
Tel (0827) 63352
Telefax (0827) 53626

IRELAND
Valli & Colombo Ltd.
Tel (01) 536255

U.S.A.
Valli & Colombo (U.S.A.) Inc.
Tel (818) 359-2569
Toll Free (800) 423-7161
Telefax (818) 3580743

FOCCHI PANORAMI®

achievements in architecture

PAUL DAY INSPACE X



QUAY WEST PROJECT, TRAFFORD PARK, MANCHESTER

Architect: The Ratcliff Partnership Ltd

The advantages of PANORAMI®

FOR THE ARCHITECT

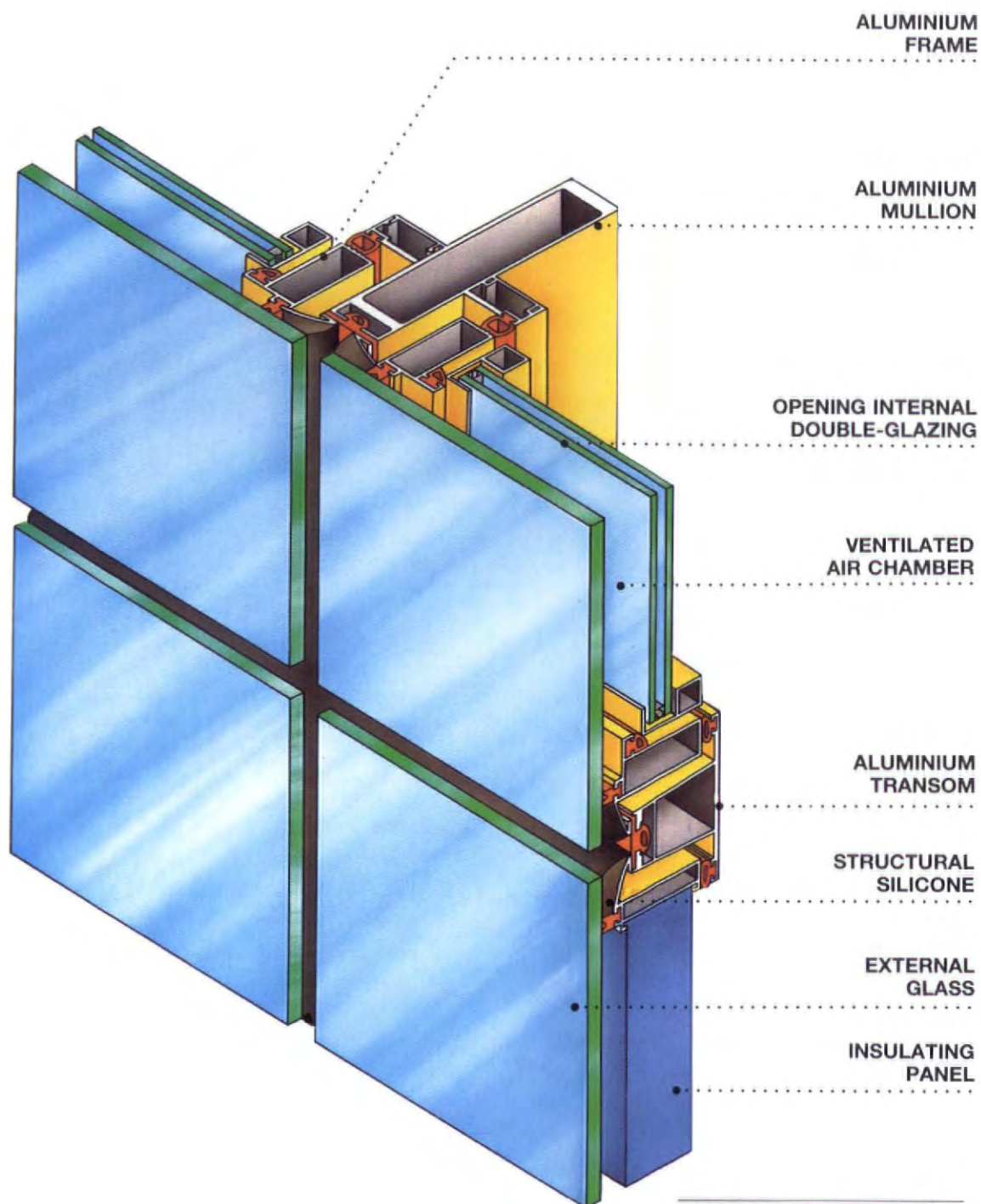
Freedom of expression in an innovative system

FOR THE CONTRACTOR

Clean site, rapid installation, no scaffolding

FOR THE CLIENT

Quality and image
Easy maintenance
Resistance to water and air penetration
Energy savings and acoustic comfort



PAT. N. 8702370/87830274-4

PANORAMI® SYSTEM

Prestigious glass walls of modern architecture have become the fundamental means of expression. Exposed metal structures are gradually disappearing as the result of technological innovation of components, glass, aluminium and associated products.

This trend has been carried to its extreme with the all glass curtain wall, a transparent envelope, visibly unsupported by metal frames and broken only by narrow lines surrounding each sheet of glass.

Focchi researched and developed the new PANORAMI® system combining the typical merits of silicone technology, with advantages to perform economical installation, easy maintenance, thermal and acoustic standards.

PANORAMI® utilizes a single reflective glass panel on the exterior thus creating an external ventilated air chamber, accessible from inside for cleaning by means of an internal opening double-glazed unit.



Focchi UK Ltd
p.o. box 646
Padbury
Buckingham
MK18 2AF

Telephone 0280 823344
Telefax 0280 823301



MAKE L I G H T W O R K

In the beginning there was, and still is, light.
Our most valuable resource.

A pity then, that so many glazing systems seem to do their best to exclude it.

Thick, heavy glazing members not only work to detract from your design, but they also exclude that which you would admit, Light.

Not so with VITRAL.

VITRAL is a complete, integrated glazing system of slim, ultra light, self supporting panels which may be installed as

fixed or opening lights – with no additional framing.

VITRAL panels are manufactured to your specification and may be single or double glazed with any type of glass or solid infill, making the VITRAL system suitable for all atria, pitched roofs and vertical cladding.

Our technical design service can assist with advice, design detail and detailed load and stress calculations, and can also recommend suitable contractors for estimating and installation.

Specify VITRAL. – And make light work, for you.



A vital and integral part of the design is the fail-safe smoke ventilation system which meets all the current stringent requirements for smoke control. And as you would expect from VITRAL the automatic actuators are also slim and stylish and will not hinder your design.



The Grange Nursing Home, Bottisham.
Architects: Cambridge Architects Partnership.

Schofield Centre, Le
Architects: Crampin

VITRAL®

Vitral U.K. Ltd., 94, Regent Street, Cambridge, CB2 1DP

Telephone: (0223) 356662, Fax: (0223) 460193.

KOLLER

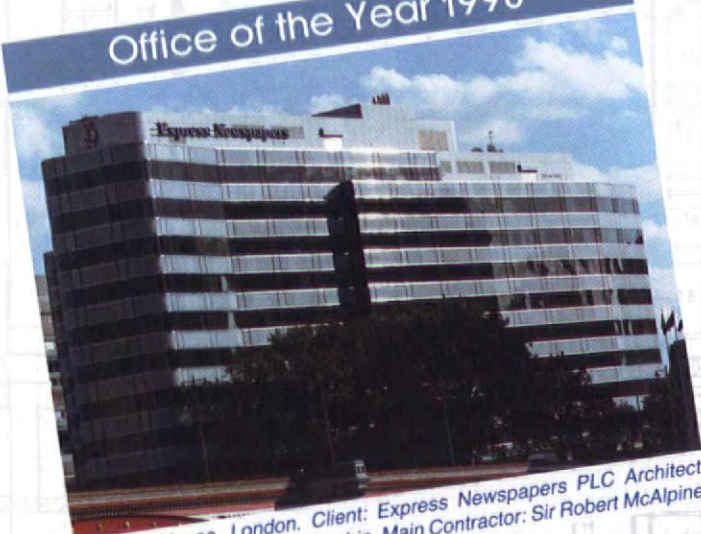
METALLBAU

Office of the Year 1989



Refuge House, Manchester. Client: Refuge Assurance PLC. Architect: Building Design Partnership. Management Contractor: Laing Management Contracting Ltd.

Office of the Year 1990



Ludgate House, London. Client: Express Newspapers PLC. Architect: The Fitzroy Robinson Partnership. Main Contractor: Sir Robert McAlpine.

Office of the Year 1991

?

It is our fine attention to detail and our reputation for quality, service and technical excellence that makes us designers and installers of the facade for the winner of the "Office of the Year" award two years running.

KOLLER (UK) LTD
Telephone 081 940 1636
Fax 081 948 8238
96 Lower Mortlake Road
Richmond, Surrey TW9 2JG

CURTAIN WALLING, WINDOWS & CLADDING

DESIGN, BUILD & INSTALLATION
THROUGHOUT THE WORLD

NEOPARIES

Crystallized Glass

High-tech glass building material is used in a Tokyo subway station.

Comprehensive engineering data and installation information are available on request. Please call or write.

Nippon Electric Glass Co., Ltd.
Building Material Division
1-14 Miyahara 4-chome,
Yodogawa-ku, Osaka 532, Japan
Tel: 81-6-399-2721
Fax: 81-6-399-2731

Crystallized glass "Neoparies" is a new type of building material that combines the depth and beauty of glass with the strength and durability of natural stone. Its resistance to acid is 13 times that of granite and 130 times that of marble. In addition, thanks to its zero-percent water absorption rate, there is no possibility of freeze damage. Also, because Neoparies possesses the properties of glass, when heated it can be softened and shaped to create curved panels. Although its base color is white, Neoparies also offers a variety of rich colors.

Mitsukoshimae Station on Tokyo's Hanzomon Subway Line With the characteristic luster of glass, Neoparies is a crystallized glass building material whose myriad inner crystals reflect and shower light in all directions. The ability to wipe Neoparies clean of markings makes it ideal for use on station walls and columns where it creates a light pleasant atmosphere.

Representatives in Europe

T.L. Tiles International Limited
9 Tolpik Road, Wardpark East,
Cumbernauld G68 0LW,
U.K.
Tel: 0236 732227
Fax: 0236 720857

Sumitomo France S.A.
87 Avenue de la
Grande Armée 75782
Paris Cedex 16
France
Tel: (1) 4067 8400
Fax: (1) 4067 9861

Sumitomo Corporation
Stockholm Liaison Office
Drottninggatan 25, P.O. Box 16079
103 22 Stockholm
Sweden
Tel: 08/24 27 15
Fax: 08/20 20 82

Dekker Natuursteen
Rading 154, P.O. Box 40
1230AA Loosdrecht
Netherlands
Tel: 02158 3051
Fax: 02158 6296

Mitsukoshimae Station
Location: Chuo-ku, Tokyo
Design: Teito Rapid Transit Authority
Neoparies: Beige (504), Dark brown (656)



To understand
how Modernfold
stays first,
look at what
we did last.

Hong Kong Convention
and Exhibition Centre, Hong Kong



Modernfold will do it right, not just get it done. Whether accordion, flatwall, or portable panel, every Modernfold installation reaffirms why we've been the leader in movable wall systems for over 50 years. Today, that leadership has become even stronger, driven by a total commitment to quality and service throughout the company. A promise and commitment that come with every Modernfold product and assure you we stand behind everything we do.



Modernfold's Quality Commitment

Modernfold is committed to delivering products and services which meet the requirements of our customers.

As members of the Modernfold team, each of us pledges to provide our product or service error free, on time, every time.



ANTI BREAK-IN, ANTI BURGLAR PROFILES FOR ROLLING SHUTTERS IN ALUMINIUM AND INSULATED STEEL

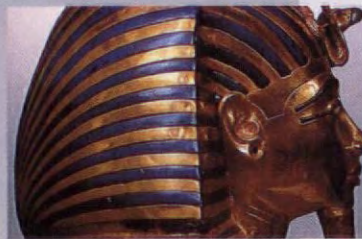


PROFALCO

43011 BUSSETO (PR) ITALY — TEL. 0524/92041-2-3 — TELEX 531656 PROFAL — TELEFAX 0524/9111

Deliberately created for the new energetic demands, thoroughly resistant, ideal for new installations and replacements. The mark PROFALCO comes from the experience obtained in aluminium and steel-working and its insulation

A FEW THINGS ARE MADE TO LAST



Architects and designers now can emulate the example of craftsmen 4000 years ago. The same lasting beauty of vitreous enamel, is the primary characteristic of **Ceramicsteel** today.

Ceramicsteel — strip steel in complete fusion with ceramic minerals, fired twice at 800°C in a continuous line process under rigorous quality control procedures.

All this gives unrivalled resistance to wear, ageing, vandalism, chemical attack, bacteria, extremes of temperature, scratching...and it's absolutely colourfast.

The **Alliance International Group** offers a systems-based approach to architectural problem solving for exterior claddings and internal partitions with unique scope for integrated graphics and signage.

**CERAMICSTEEL CLADDING
— BEAUTY MADE TO LAST**

ALLIANCE
CERAMICSTEEL PRODUCTS



**EUROPEAN HEAD OFFICE
ALLIANCE EUROPE**

PO Box 19
56 Zuiderring
3600 Genk
Belgium

Telephone: (32) 11-356531
Fax: (32) 11-356539

**USA HEAD OFFICE
ALLIANCE AMERICA**

PO Box 920488
Norcross
Georgia 30092

Telephone: (1) 404-447-5043
Fax: (1) 404-446-5951

SCANDINAVIA	GERMANY	FAR EAST	SPAIN	FRANCE	UNITED KINGDOM	ITALY
ALLIANCE PENTAGON	ALLIANCE GERMANY	ALLIANCE PACIFIC	GM INTERNATIONAL	ALLIANCE AUBECO	ALLIANCE UK	SORIMA
Telephone: (45) 66109030	Telephone: (49) 211-4980198	Telephone: (32) 11-356531	Telephone: (34) 1-4574469	Telephone: (33) 27454525	Telephone: (44) 536-522473	Telephone: (39) 2-2829250
Fax: (45) 66109080	Fax: (49) 211-490422	Fax: (32) 11-356539	Fax: (34) 1-4572686	Fax: (33) 27351549	Fax: (44) 536-410805	Fax: (39) 2-2829448



Advanced Equinox downlighters – cool operation
with good colour rendition.
Alternative light sources: HQI-T; tungsten halogen;
White Son; metal halide; Metalarc.



New faceted reflector design and different
beam angle options.
Reduced glare and exceptional photometric
performance.



High output lamps for greater coverage.
Floating glass accessories enhance style
and function.



CATALOGUE AVAILABLE

ADVANCED
EQUINOX



BRIGHT GREENS.

Concord **GTE**

FAX: 071 497 1404

TEL: 071 497 1400



LEADING IN METAL CEILING SYSTEMS



GEMA BAUELEMENTE AG
KUNKLERSTRASSE 9
CH-9015 ST GALLEN
SWITZERLAND
TEL: 41-71-321 532
FAX: 41-71-312 916

GEMA METAL CEILINGS are one of Europe's largest and best known ceiling manufacturers. Apart from our metal ceilings we offer an extensive range of individually designed heater casings, column casings and wall linings.

GEMA have one of the largest ranges of ceiling systems and perforation patterns, which can be designed to suit any building module, and still offer demountability and integration with light fittings, air conditioning etc. Our ceiling products offer the specifier a purpose made, versatile range of systems which are ideal for today's fast-track building programs.

**Branches: Munich • Amsterdam • Antwerp • Barcelona • Madrid • Lisbon • London •
Dublin • Dubai • Singapore • Hong Kong • New York • Vienna**



BENDING THE RULES OF GLASS PROCESSING IS JUST ONE ASPECT OF OUR CAPABILITY

Of course Darby can accommodate your needs in the more familiar fields of glass processing — tempered glass and insulating glass units of all types, sliding patio doors and mirrored wardrobe fronts, decorative glass products and more.

But now, at last, the design possibilities of glass can be explored to the full — because Darby Group offer curved tempered glass in panels up to 2.3m curvature, 2.6m height/length, and in thicknesses from 6mm to 12mm.

Our advanced bent tempering equipment curves and toughens glass in one process, to your individual requirements, creating large areas of unobstructed curved glass surface for exceptional aesthetic effect.

Imagine the applications as a covering medium for atria, walkways, malls, conservatories, entrance foyers. Make use of its streamlining effect on building exteriors, adding curved detail to insulating glass or spandrel panels within curtain walling. Use curved glass inside — for partitioning that 'flows', for balustrading, lift capsules, display cases, shower enclosures. Or outside for street furniture, shop windows, exterior lifts, shelters. And remember it can be even more decorative — with enamel painted and screen printed options.

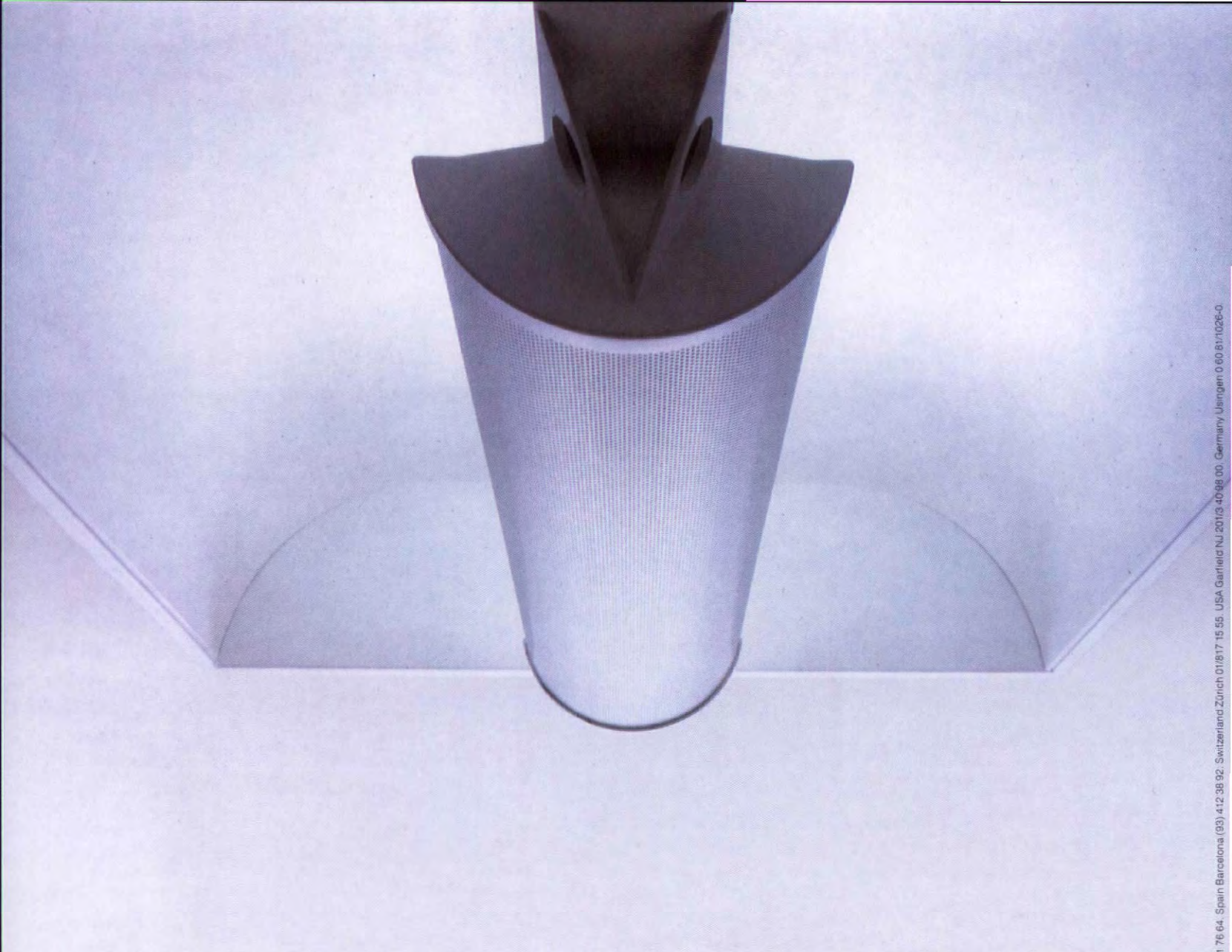
The practicalities are as impressive as the aesthetics. Our curved glass is offered in single or double glazed units, incorporating clear, body tinted, solar control, low emissivity, 'Clear-Shield' non-stick surface treated glass types. Insulating glass can incorporate acoustic limiting specifications or gas filled cavities.

Glass becomes almost the most creative material available to architects. Second only to imagination.



Darby
leading the field in glass development

Darby Group plc, Sunningdale Road, Scunthorpe,
South Humberside DN17 2SS, England.
Tel: (0724) 280044 Telex: 527327
Fax: (0724) 868295



**They'll see
the light.
Not the lamp.**

Zumtobel RCE: the high quality standard product which provides you with a far-from-standard solution. A recessed uplighter which elegantly balances the aesthetics of indirect lighting with the ergonomics of direct lighting. Designed and engineered to Zumtobel's exacting standards, the RCE satisfies exceptional demands. Form and function are perfectly harmonised. Zumtobel's impressive range: innovation at work, precision manufacturing for assured results. Computer-

enhanced design and technology, renowned quality and performance, and a worldwide commitment to excellence.

Zumtobel the standard-setters.

Call us and see why.

Zumtobel Lighting Ltd.,

Unit 5 – The Argent Centre,
Pump Lane, Hayes, Middlesex

UB3 3BL, United Kingdom.

Tel. 081-573 3556

Fax 081-573 3560

ZUMTOBEL 
LIGHTING
THE WAY



GENUINE WOOD

GENUINE WOOD

GENUINE ART

GENUINE ART

Genuine wood can create warm and intriguing rooms - inspiring to design and to decorate.

Lifting office buildings, exhibition halls and industrial areas as well as residential projects into genuine art.

Junckers is the largest producer of prefinished solid hardwood flooring in Europe. All based on temperate zone wood and regenerated from a vigorous replanting project.

For more than 6 decades Junckers has constantly worked with, and further developed the possibilities of using solid prefinished hardwood floorings.

Contact your local dealer and see an assortment of prefinished solid floors from only 8 mm thickness up to 22 mm in dark and light colours and different flame grades.

The unique "Clip System" enables you to use solid hardwood flooring on any levelled base. A system which in itself can make genuine art possible. All in all Junckers has the basic materials to lift an architectural design into a new dimension.

J+J Business-to-Business

JUNCKERS

Junckers Industrier A/S
Vaerftsvej 4, DK-4600 Koege
Phone + 45 53 65 18 95
Telefax: + 45 53 65 99 36

re reply Service or contact your local dealer for further information. Draw from our more than 60 of experience within solid prefinished hardwood floorings.

Kingdom, Junckers Ltd., (0376) 517512. **U.S.A.**, Junckers Hardwood Inc., (714) 579-3188. **France**, Junckers France S.A., (1) 02. **Holland/Belgium/Luxembourg**, Junckers B.V., 01720-30011. **Spain**, Junckers Iberica S.A., 1-4620320. **Sweden**, s Industrier A/S, 040-41 61 25. **Norway**, Junckers Norsk A/S, (02) 64 76 90. **Iceland**, Egill Arnason HF, 182111. **Italy**, H. P. S.R.L., 0585-632344. **Switzerland**, Bauwerk Parkett AG, 071/74 74 74. **Korea**, WTC Co. Ltd., 2-555-4191. **Hong Kong**, Limited, 8612212. **Japan**, ABC Trading Co. Ltd., 35 07 71 50. **Canada**, Centaur Products Inc., (604) 430-3088. **Germany**, s Parkett G.m.b.H., 4000 Düsseldorf.



The furniture is wide ranging too in its application - there are more than twenty functions available with four differing backsets, together with fire rating and handicapped use approvals. All sets can be fully masterkeyed.

PREMIAPRI door lock, uniquely designed for 'hands free' operation, available in a wide range of 'designer' colours - can now be obtained in many parts of the world.

Italian design, foremost in Europe, is strikingly evident in every aspect of the PREMIAPRI press open door furniture. Manufactured in Italy by SERRATURE MERONI S.p.a., finished in a wide variety of both colours and metals (brass, steel, stainless and aluminium) the PREMIAPRI range can be 'mix and matched' during installation to blend with both doors and interior designers requirements.

Door knob design and function has altered little during the past 100 years, PREMIAPRI has changed all that. Not only does the appearance of the knobsets with their wide range of available colours, enhance any decor, but the innovative method of operation, which can be completely hands free, has gained much admiration and approval wherever they are installed.

The application of advanced technology, so much accepted in many products used in everyday life, has now reached doors! The PREMIAPRI knob set, once installed, will prove to be indispensable.



CANOBBIO covers the whole world



Since 1926 Canobbio S.p.A., the leading company in the field of light coverings, has installed numerous sophisticated coverings using Tensioned Structures, Air Structures, Geodetic Structures and Lamellated wooden Structures for sport, industry, entertainment, exhibitions, architectural purposes, fair and transport, thanks to the co-

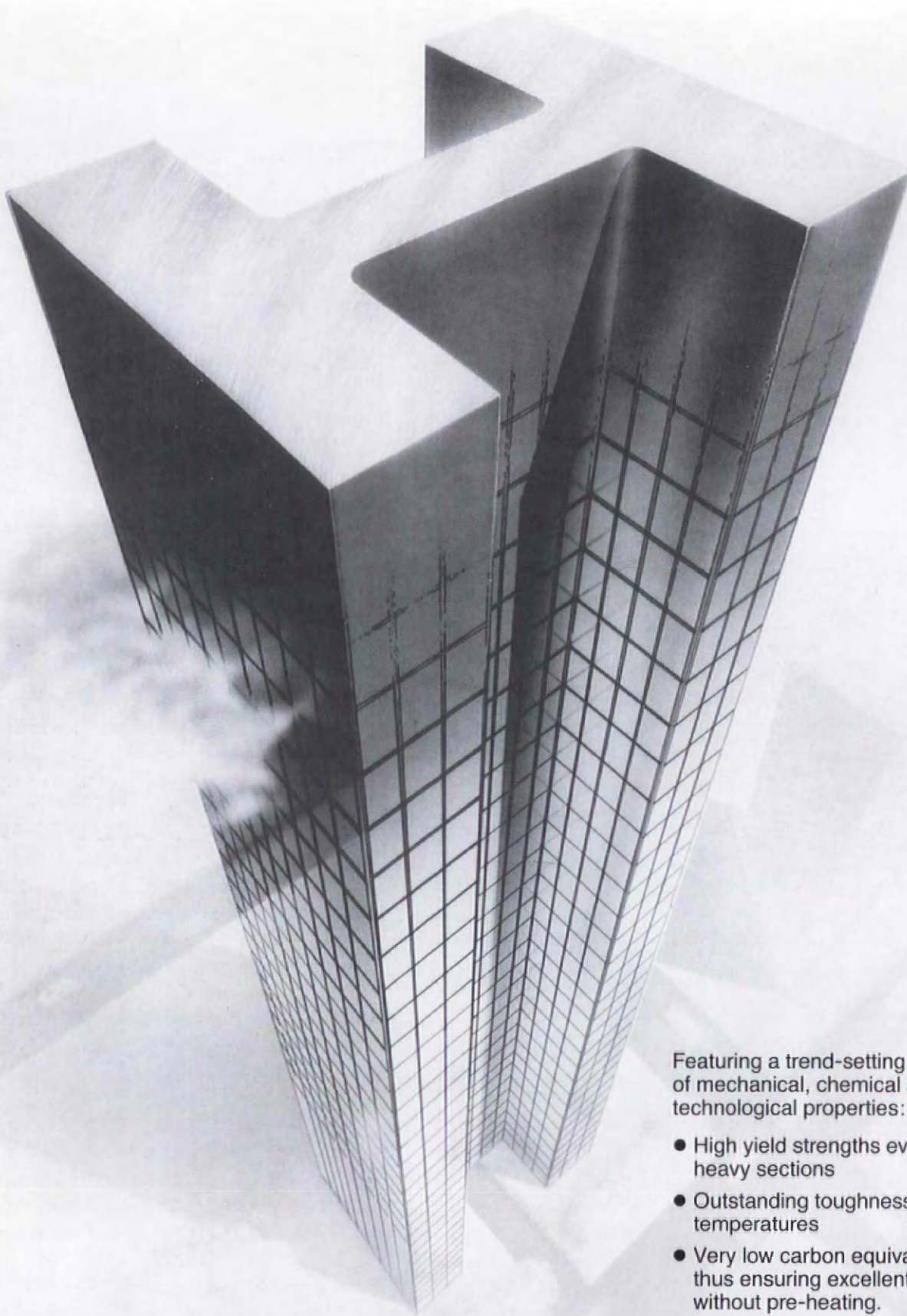


CANOBBIO

THE TECHNOLOGY OF COVERING

operation of highly reputed designers, architects and engineers, as well as to their skilled staff and the use of advanced technologies.

The Palatrussardi, the tensioned structure covering Piazzale Italia at the Milan Fair and the Tent Theatre in Monte Carlo are some examples of Canobbio's large production.



HISTAR[®]

**A new generation
of rolled sections
for economical
steel construction**

Featuring a trend-setting combination
of mechanical, chemical and
technological properties:

- High yield strengths even for ultra heavy sections
- Outstanding toughness at low temperatures
- Very low carbon equivalent, thus ensuring excellent weldability without pre-heating.

The recipe:

QST

(Quenching and Self-Tempering)
a new, revolutionary in-line process —
from ARBED, of course.

**The rolled beam solution,
with your partner:**

ARBED

Contact:

TradeARBED S. A.

Avenue de la Liberté, L-2930 Luxembourg
Phone: 47 921, Telefax: 48 53 28

WORLD ARCHITECTURE



Peichl the technologist.



Peichl the cartoonist.

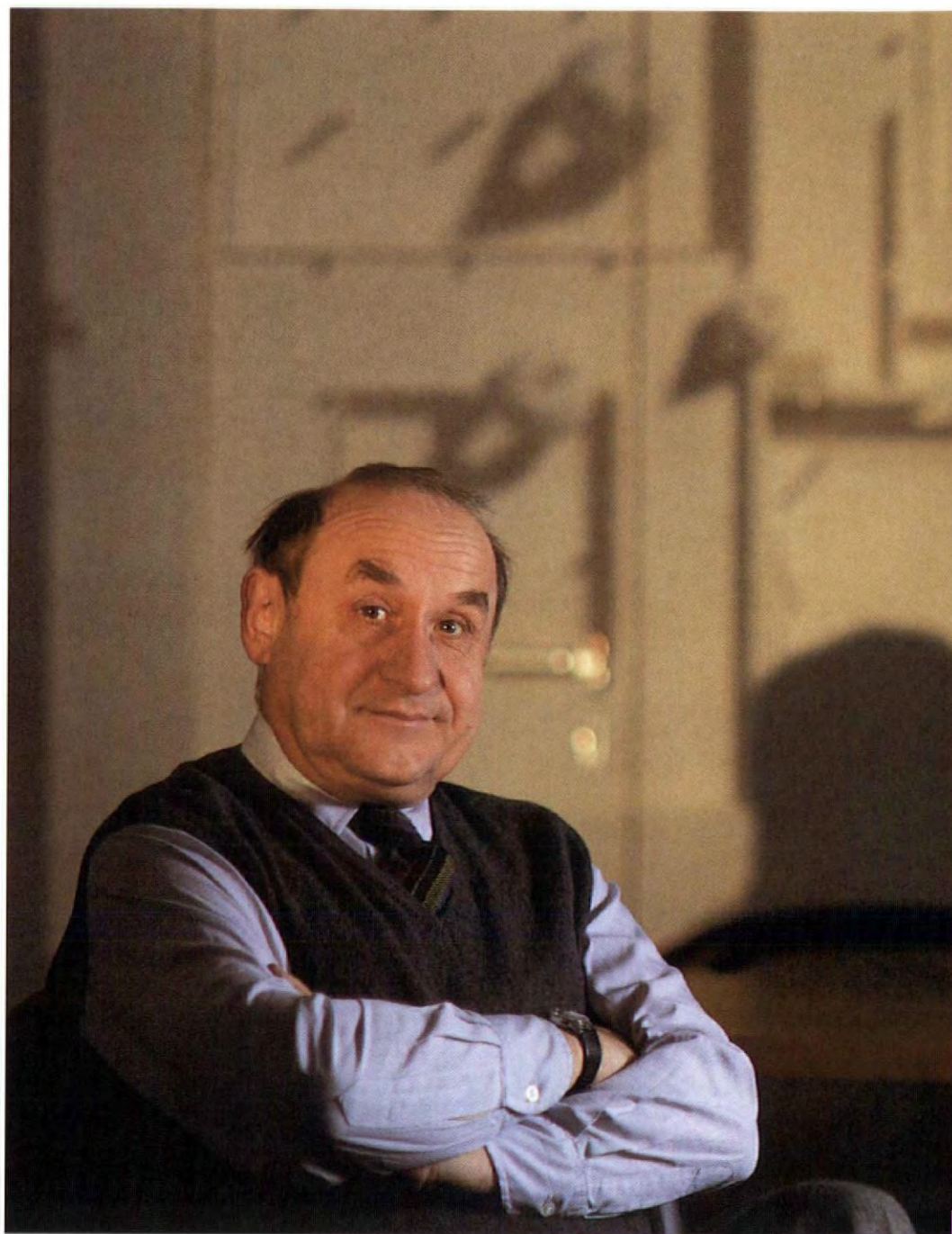
Modern architecture and the machine have gone along hand in hand throughout this century. It often seems incredible now that it was Frank Lloyd Wright – the true champion of organic and democratic architecture – who had pleaded for its acceptance in 1901. Just a few years earlier voices had been raised in *fin de siècle* Vienna extolling the virtues of the new modern machine culture. Among those was Adolf Loos and that great theoretical propagandist architect and teacher Otto Wagner who exhorted the readers of his seminal work *Moderne Architektur* (1895) to heed the signs of the times and demand an architecture rooted in the new technology.

The opportunities afforded by the burgeoning technologies had inspired a new breed of inventive and creative individuals, the nineteenth century engineers. They were the exponents of new structural methods who recognised a basic concept underlying all structures, which Wagner claimed was an “inventive faculty”. It was dependent upon “a certain natural ingenuity”. In buildings such as the famous Post Office Savings Bank and the powerful Church am Steinhof as well as many utilitarian service buildings in Vienna, Wagner developed the first really mature technological architecture of this century.

In this issue of *World Architecture* we celebrate the technological and ingenious work of another significant architect and teacher from Vienna’s forward-looking cultural milieu. Unlike the work of some of the recent so-called international hi-tech architects there is nothing simple minded or obsessive about Gustav Peichl’s buildings. Peichl had demonstrated a healthy interest in technology at an early stage in his career when he designed a series of radio stations for the ORF. He displayed an enviable degree of professional competence and a structural ingenuity that instantly put these designs on the world architectural map. They have been followed by many other projects which have included thoughtful conservation work and numerous competition entries, all of which exhibit the utmost clarity of purpose and forms.

However, Peichl’s gifts are far wider than that of any conventional practitioner. He teaches at the celebrated Akademie der bildenden Künste, at the famous master school that Wagner founded. He is also a well respected member of that group of current Viennese architects that includes Hollein, Holzbauer and Co-op Himmelbau. The group owes much of its vigour to the inspiration of the original Vienna school. Additionally, he is a most talented caricaturist and cartoonist. Behind all these activities there lies a real, mature and versatile performer, a trapeze artist who is determined, it seems, to balance all the acts in architecture and life’s circus. We are proud to show his work and reflect upon his achievements. □

Dennis Sharp



Viennese architect, teacher and cartoonist Gustav Peichl belongs to that modern Austrian design tradition which seeks to reconcile art and science, intellect and emotion. Yet he is also the acknowledged master of the architecture of technology, and has developed a fluent new language of composition which has brought him international acclaim. In the first article in a multiple-part profile of Peichl's life and work, Dr August Sarnitz of the Otto Wagner Archive provides an overview of his achievements.

GUSTAV PEICHL

ARTIST OF THE TECHNICAL



Gustav Peichl: following the classical Viennese tradition of the modern in architecture.

If architecture could be defined as the art and science of building, and if technique could be defined as a method of doing something expertly, then Gustav Peichl's buildings could be described as revealing the essence of architecture and technique. Architecture, however, is more complex than a casual correlation between art and science, and Gustav Peichl's Viennese background suggests that there is more heterogeneity in his architecture than is visible at first sight.

Vienna has a longstanding tradition within the architectural profession. Viennese theories and names have influenced the discourse of architecture throughout the world. But it is not only Gottfried Semper, Otto Wagner, Adolf Loos, Josef Frank and Lois Welzenbacher who defined the understanding of a modern and contemporary architecture. Architects like Joseph Olbrich, Josef Hoffmann and Dagobert Peche suggested that architecture is art – referring to Alois Riegl's artistic theories of the

Kunstwollen rather than to the idea of technique and technics.

Otto Wagner, who is one of Gustav Peichl's acknowledged heroes of modern architecture, and Sigmund Freud, who is not only the father of the unconscious but also the inventor of the dream analysis, indicate the wide range of references upon which contemporary Viennese architects draw to investigate the inner structure of architecture and being.

With Gustav Peichl, it is both: architecture *and* technique, art *and* science, ratio *and* emotion, versus architecture *or* technique, art *or* science, ratio *or* emotion.

The integration of different aspects and the acceptance of duality is the strongest argument in Peichl's architecture. If there is a tendency to symmetry and symmetrical buildings, there is always a counterbalance or irritation in order to escape the classical order of symmetry (elementary school, Krim, Vienna, 1964).

If there is the ordering rationale of the grid,

there is also the circular or semicircular form as part of the architectural dialogue (ORF radio studios, 1972, with intersecting floorplan of grid and circular shapes).

Peichl carefully explores the possibilities of structure, but structural considerations are never more than a means to an overall architectural composition. In this sense Peichl's architecture is following the classical Viennese tradition of the modern where an equilibrium of structural, functional and aesthetical aspects form an artistic interpretation of a building concept.

Filling an artistic vacuum

Gustav Peichl, born 1928, was trained as an architect at the Academy of Fine Arts in Vienna, with Clemens Holzmeister as his teacher. However, his early buildings reflect an affinity to the work of Roland Rainer, rather than that of his teacher at the Academy.

Peichl's first large commission was in 1958, a

new town with administrative offices, Garden City Maria Enzersdorf, 30 kilometres south of Vienna (with Kiener and Hubatsch). It recalls the garden city idea of Roland Rainer, with atrium houses and separation between automobile and pedestrian circulation.

Given Austria's architectural history, it was not surprising that the postwar architectural generation was concerned with filling the artistic vacuum left by Nazi Germany. During the 1960s Peichl was editor of the leading Austrian architectural periodical, *BAU*, together with Oswald Oberhuber, Walter Pichler and Hans Hollein.

The importance of *BAU* in Austria could only be compared with that of *Opposition* in the 1970s in the USA. The commitment to modern architecture is pervasive throughout this periodical. Peichl's architecture is therefore deeply rooted within an understanding of architectural history.

His famous ORF radio studios (1969-1980) were designed almost as a machine-like, typological element of communication for six Austrian cities: Dornbirn, Innsbruck, Salzburg, Linz, Graz and Eisenstadt. Inspired by such famous architects as Golosov, Angelo Mazzoni, Ladowski and Melnikov, the radio studios embody flexibility, functionality, efficiency and a great "image" of technology using the

conventional iconography of the early twentieth-century machine aesthetic. The ORF radio stations, the silver shrines of communications, won the Reynolds Memorial Award for the architect in 1975.

A sensitive commission

However, the next major commission was not to design a mega-machine building, but a very sensitive, almost non-architectural radio satellite station in the rolling countryside of Styria. This station in Aflenz (1976-79) developed in response to environmental protection which prohibited any building construction in the countryside. Peichl's solution was an underground building with the large radio-antenna being the only visible object. In this building Peichl comes closest to a significant contribution to a symbiosis of landscape and pure technique.

The radio-satellite station is organised around a large inner courtyard (30 metres in diameter), open to the sky, serving as an entrance to the underground buildings and to the two antenna platforms. With great sensitivity Peichl also integrates the workers' housing units, using a very traditional type of "wine-cellar" building, with the main elevation forming a vault-like "Gestalt".

Especially during the winter, the satellite

Conventional iconography of the machine: Peichl's ORF radio stations at Linz, 1972 (left); and Graz, 1981 (right).





station holds an abstract quality of almost mythical origin: modern communications technology resembles sacred signs of an ancient temple site.

It is this quality of simultaneous being, abstract and representational, which distinguishes Peichl from many of his contemporaries. His architecture is never "fashionable" but always contemporary; his architecture is not at the cutting edge of "high tech", but always technical.

Avoiding fashionable formulas

Returning to his buildings years after their completion, they still hold a strong physical quality, they don't have to be new to be interesting. To quote Peichl: "The quality of a work of architecture, and ultimately that of the architect himself, is seen in his ability to work through the influences he receives, to assess them critically, and to develop them

further, rather than to take fashionable formulas and either uncritically reuse them or make them worse."

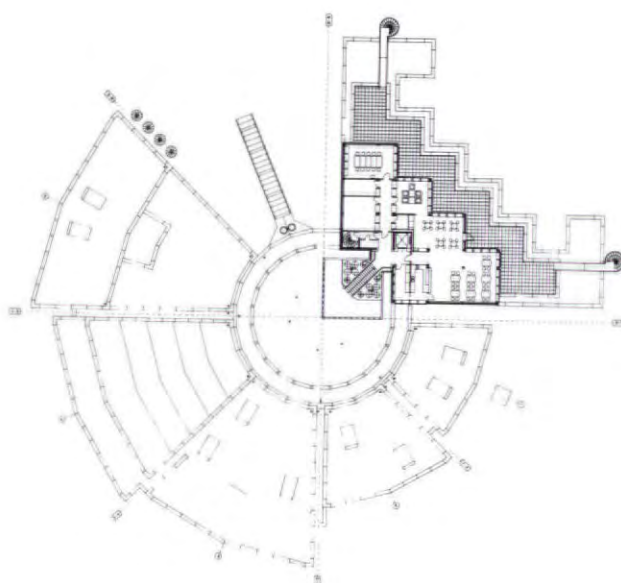
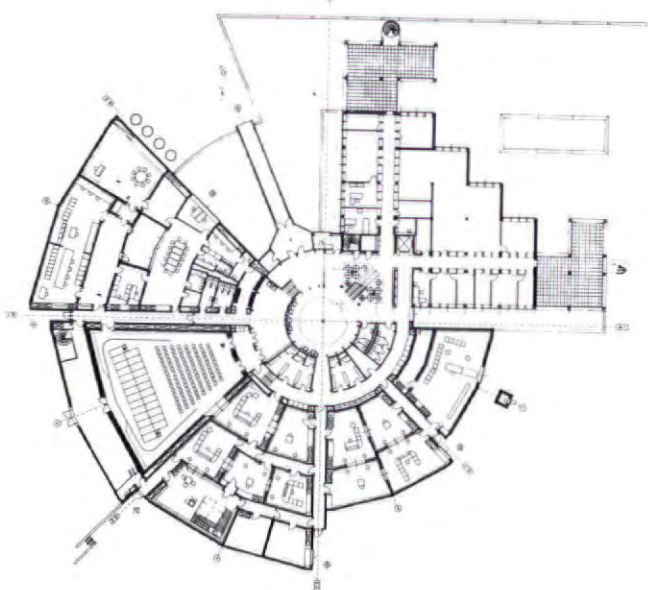
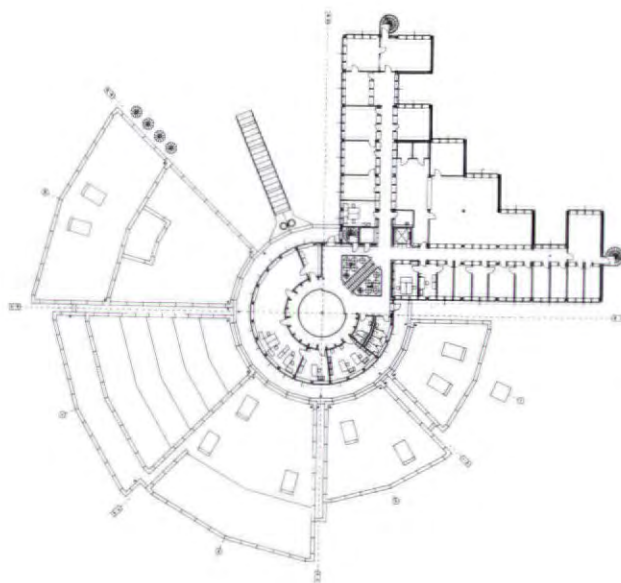
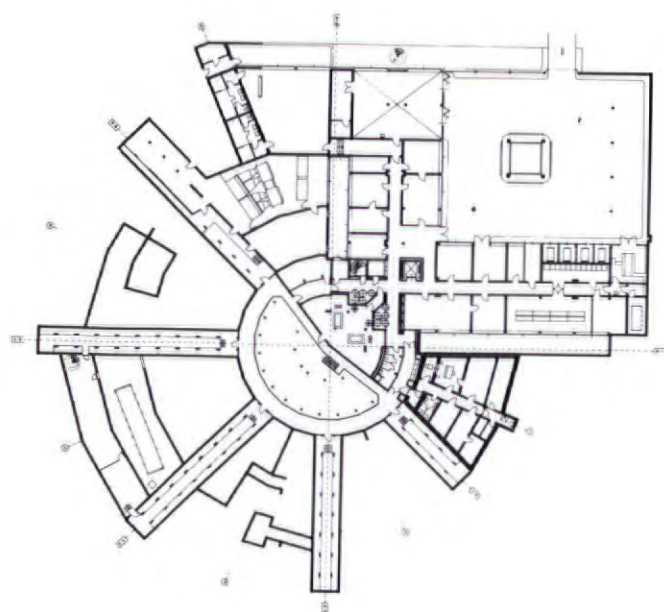
Almost within a sequence of architectural buildings dealing with communication and technology, Gustav Peichl received the commission for an environmental protection building in Berlin-Tegel. The Phosphate elimination plant (1973-83) is a structure to clear polluted water and recycle clean water back into the Berlin lakes. The building consists of three parts: the service administration building, three water tanks, and a pumping station. Within the functional requirements, Peichl organised the main building overlooking the three water tanks as one unit, which metaphorically illustrates the actual "cleaning-process".

As the three water tanks are surrounded by an earthy pediment, here again one is confronted with images which immediately

Peichl's architecture is never fashionable but always contemporary: ORF radio stations at Graz, 1981 (above); and Eisenstadt, 1982 (overleaf).







Top left: Basement

Workshop
Garage
Shelter
Generators
Gym

Top right: First floor

Press office
Library
Director
Conference Room
Services

Bottom left:

Ground floor

Television studio
Public studio
Sound studios
Control room
Administration
Advertising office
Technical office

Bottom right:

Second floor

Transmitter
Restaurant
Terrace



Eisenstadt, 1978-1982, confirmed Peichl's mastery of the language of technology in architecture.

ORF radio station at Eisenstadt: a turning point for Peichl.



recall the land-art of such artists as Mike Heizer or Robert Smithson. On the other hand, Adalberto Libera's Villa Malaparte facing the ocean is also recalled.

The iconography of the ship has often been mentioned in connection with Peichl's architecture, and he himself indicates his interest in the functional and spatial concept of a ship. It is not only the iconography of the ship but also the very economic handling of space in ship design which makes this comparison valid: Peichl's buildings are compressed in order to optimize functions and space. In this sense, Peichl is a true modernist architect.

Peichl is also a perfectionist. The complex functional requirements, the materials, the performance of his buildings reflect this attitude. By the end of the 1980s the architect was engaged in social housing projects, an educational building, and two major museum projects in the Federal Republic of Germany. In both cases Peichl won the commission via an

international competition.

The Bundeskunsthalle in Bonn (Federal Art Exhibition Hall, 1986-1992) and the Städel Museum Extension, West Wing in Frankfurt (1987-1990) indicate a renewed interest in pure geometric forms and classically defined spaces rather than the open floor plan. Flexibility is possible only within defined areas. The overall shape accepts urban constraints and reflects Peichl's interest in materials.

The quality of light

Both museums are clad with natural stone, different qualities of marble, and conventional window openings and skylights where required by the exhibition spaces. The basic square shape of the Bundeskunsthalle in Bonn is highlighted by three large "lighting cones" which allow the changing qualities of daylight to penetrate deep into the building.

Most interesting, however, is the roof garden of the museum. This functions as a large

sculpture garden – continuing the idea of the early modernists that a flat roof should be used for additional purposes.

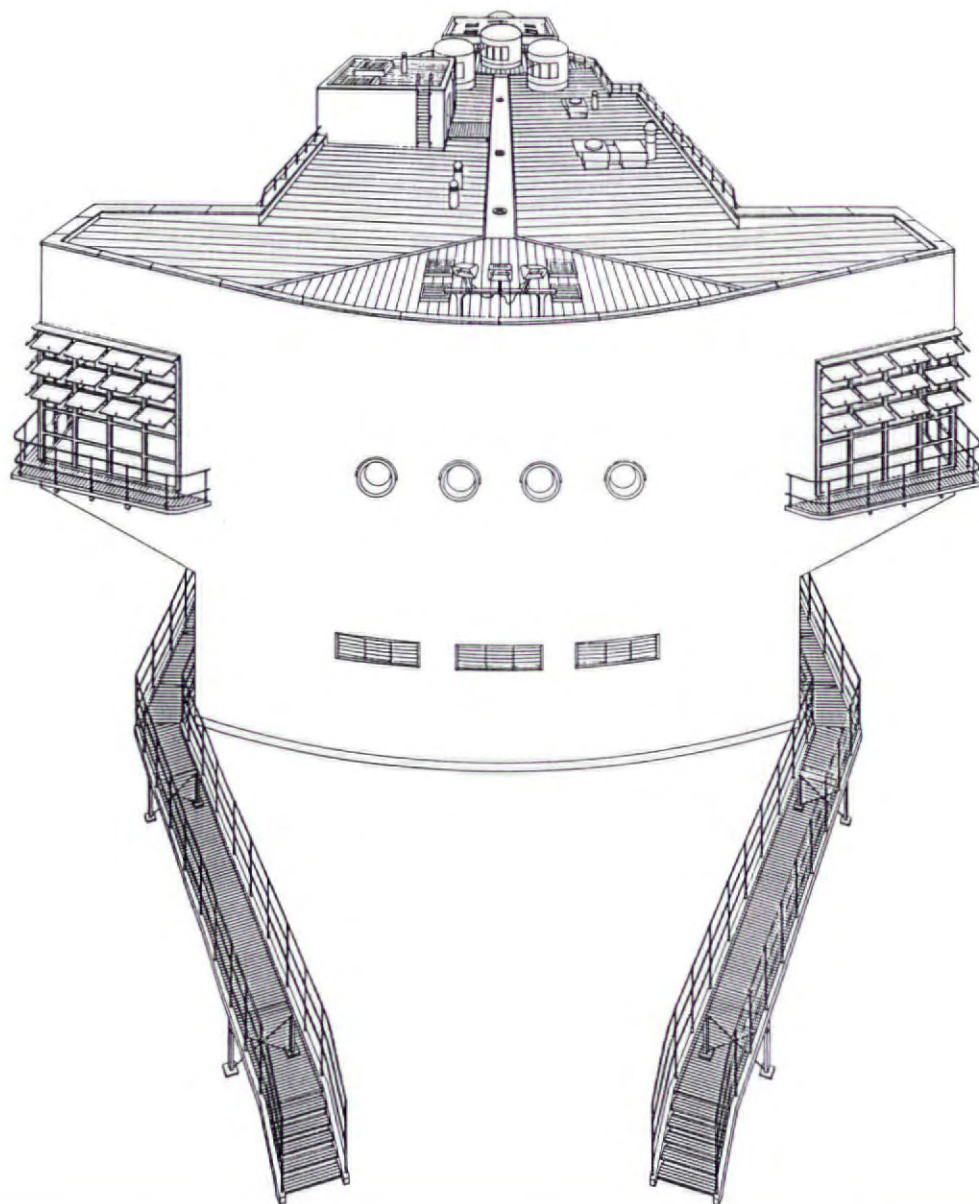
The Städel Museum continuously explores the qualities of traditional nineteenth-century skylight exhibition spaces, with the architecture as classical as possible. There are white walls, wooden parquet floors, skylights and well-proportioned passages. The architecture frames the artwork, but does not challenge its existence by being more extravagant and more present than the art-objects themselves.

In addition to being a professional architect, Peichl has taught as Professor of Architecture at the Academy of Fine Arts since 1973, and is an active cartoonist under a pseudonym, Ironimus, for Austrian and German newspapers since 1954. To some degree these three activities – architect, teacher and cartoonist – enhance each other. There is a kind of kinship between these roles as the ultimate goal of each is to reveal reality. □

Phosphate Elimination Plant, Berlin-Tegel, 1979-1983

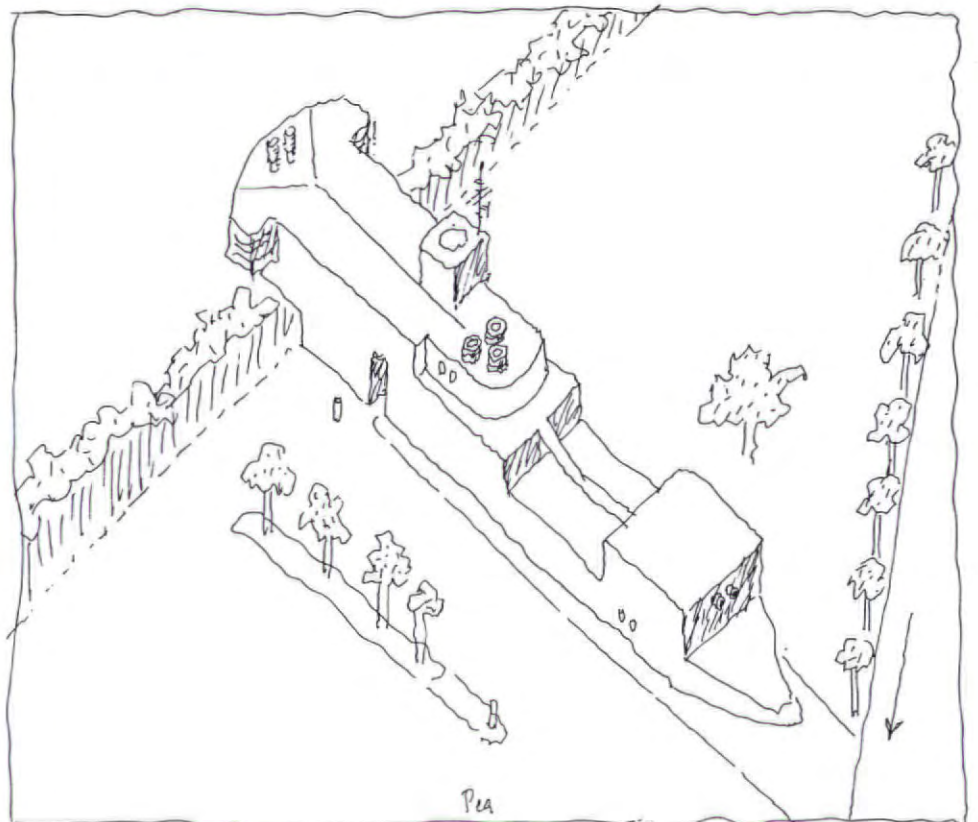
The iconography of the ship is evident in Peichl's design for this building, which was designed to clear polluted water and recycle clean water back into the Berlin lakes. Its symbolic value transforms rather than merely continues the industrial architecture of Berlin.

The grassy mound in which the building is set reflects Peichl's use of the ground as an architectonic element with its own format and aesthetic values. Peichl's work on the plant provided the starting point for further integration of building and landscape in later projects, while his economical mastery of function and space confirmed his mastery of the symbolic architectural language of technology.





UWE RAU



Silver shrine of communication: Peichl's ORF radio station at Eisenstadt.



AUSCHAFER

HOMO EUROPENSIS

Aldo Aymonino looks at Gustav Peichl's work in the European context, arguing that it reveals a subtle constant of contradiction and an awareness of the inborn beauty of technological forms so that science can become art.

Bauten der Technik by Werner Lindner was published in Berlin in 1927. Unlike the contemporary *Groszstadt Architektur* by Ludwig Hilberseimer, Lindner did not try to suggest a methodology for the configuration of the future city. But, by classifying a new functional type – the industrial building – he clearly stated the new aesthetic language of the urban philosophy of the twentieth century city.

All of a sudden, the factory and the machine had not only productive functions related to market laws and capitals, but had acquired new values and had become symbols. Industry was now regarded as a vanguard of research, as a hope to improve the quality of life for the working class as well as for the bourgeoisie.

Thus it has come to pass that projects for slaughterhouses do not look like those for law courts any longer, nor do railway stations look like cathedrals. A new aesthetic of technology

has been created which is based on ethical and methodological principles.

In 1969 Gustav Peichl won the competition organised by ORF for the construction of four – which later became six – regional offices of the state radio broadcasting company. Peichl was confronted with sophisticated technologies and strict competition requirements: the same functional and distribution solutions were to apply to the buildings while maintaining the flexibility to adjust the projects to possible extensions and very different sites. He had reached an important turning point in his career and started to search for a new language where architecture and technology are joined in a contemporary sense.

Until then Peichl had skilfully developed the "modern style". But although he had improved the control on the project and the technical correspondence of the built work, he was not an outstanding figure in European architectural research.

Still, thanks to his solid, professional background which concentrated on the technical and expressive features of materials, Peichl was able to avoid the dangers of a frozen "International Style" of the Teutonic type and an obsessively exhibited "high tech", and proceed towards that well-balanced "new language" of the architecture of technology, of which he is the acknowledged master.

Manifesto of our time

Like a contemporary Lindner (and beyond the ideology of the Weimar Republic), Peichl is well aware of the inborn beauty of technological forms. He knows they can solve specific architectural problems and can become a manifesto of our time.

The "nautical" style, surfacing more or less clearly in most of Peichl's works, had already provided the early rationalism with a touch of modernity – just think of Eileen Gray's villa on the French riviera or compare the sections of the "Aquitania" ocean liner with Le Corbusier's suggestions. Here it is not a device to legitimate technological consistency, but a refined operation of the mind, which, through the essentials of the machine expressivity, recalls the "poetics of travel" as an emotional counterpoint to the functional logic of architecture.

The best example of this fade-over procedure is the Berlin complex in Tegel: here, the two adjoining buildings, which are very

different in function and destination, refer to the same metaphor, so that the deck (the phosphate elimination plant) and the multiple keel (the apartment block in Schlosstrasse) of a disassembled but not deconstructed ship run aground on the grassy banks of Tegeler Hafen.

With the splendid project for the satellite broadcasting plant in Aflenz (1976-79), Peichl had previously reached the peak of symbolism of architecture as manifesto of its own function, of architecture as *communication*, which had been so thoroughly investigated in the ORF stations. Peichl had begun to study the use of the ground as an architectonic element with its own formal and aesthetic values.

This study of the potential integration of building and landscape remains a constant in his latest projects (for example the roof-garden of Bonn Kunsthalle). It shows a further linguistic development, less in the direction of a building as equipment, and instead more introverted, swinging between a languishing "Sehnsucht" (longing, nostalgia), *Mitteleuropa* style, and a Mediterranean irony often bordering on mockery.

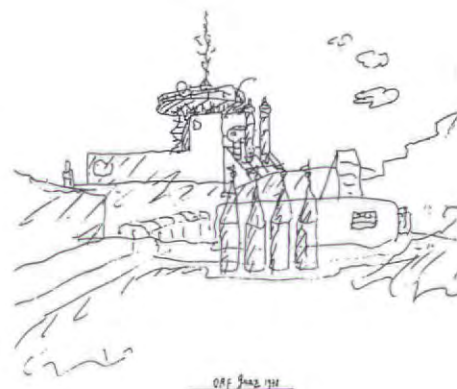
Contradiction a constant

Contradiction is a subtle constant in the works of the Austrian master. His architectural projects with their dazzling rationality, tend to hide this at first. But just a glance at his effective project sketches produces a perplexity which is seductive. How, one wonders, can the author of those (apparently) naive sketches drawn by an almost shaky hand, be capable of highly sophisticated projects in which architecture and technology are combined with rigour, clarity, balance and charm?

The answer is in the third activity (after that of architect and teacher) that Peichl has been engaged in for more than 30 years, that of cartoonist for two Austrian newspapers.

Peichl's cartoons, which can be immediately grasped even by a non-specialist, are imbued with a cutting, amiable, never excessive humour and are tinged with a lucid criticism of the road we are all walking. His polemical statements against fashionable architecture or against the anti-social personal obsessions of some well-known authors are more effective (and often more precise) than critical essays.

But the role of censor and critic does not suit well a personality endowed with such deep irony. Like all great humorists Peichl makes fun of himself and his architecture first. □



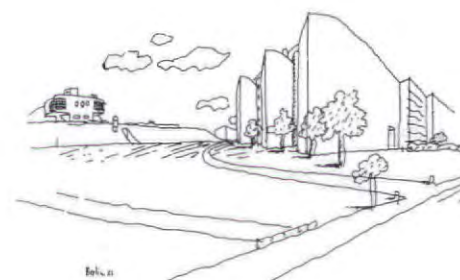
Studio for broadcasting, ORF, 1969.



Studio for broadcasting, ORF, Eisenstadt, 1978.



Phosphate Elimination Plant, Berlin, 1979.



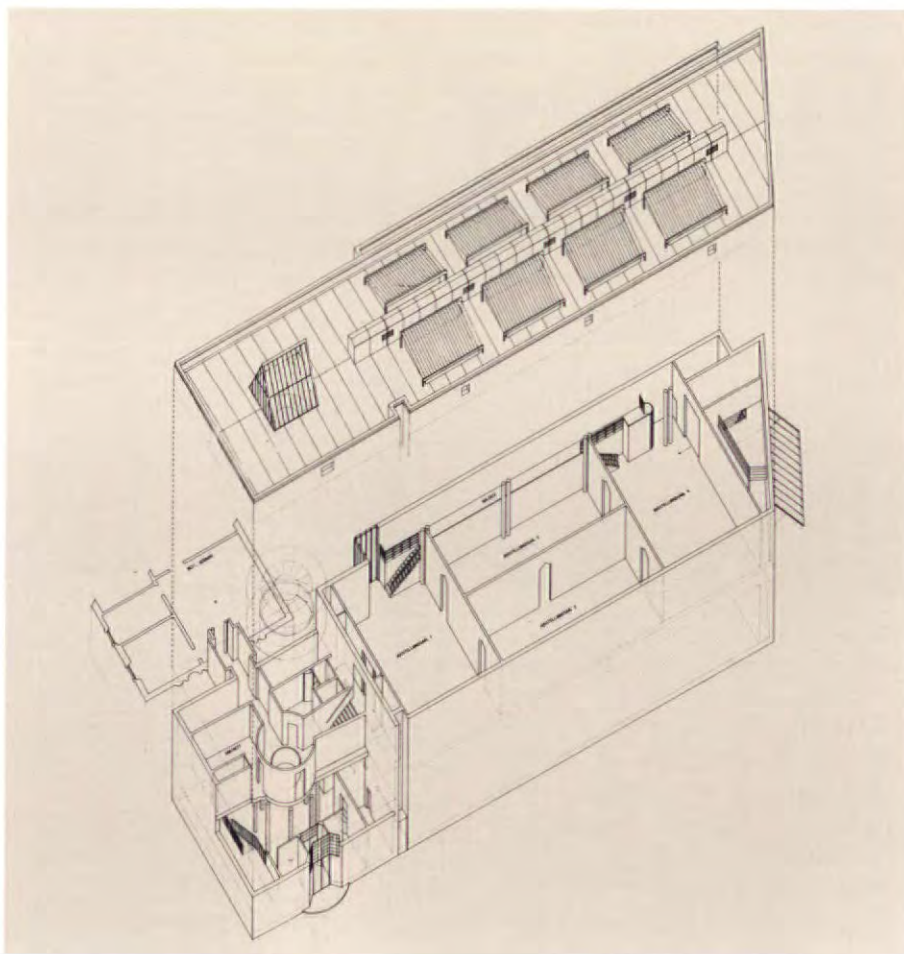
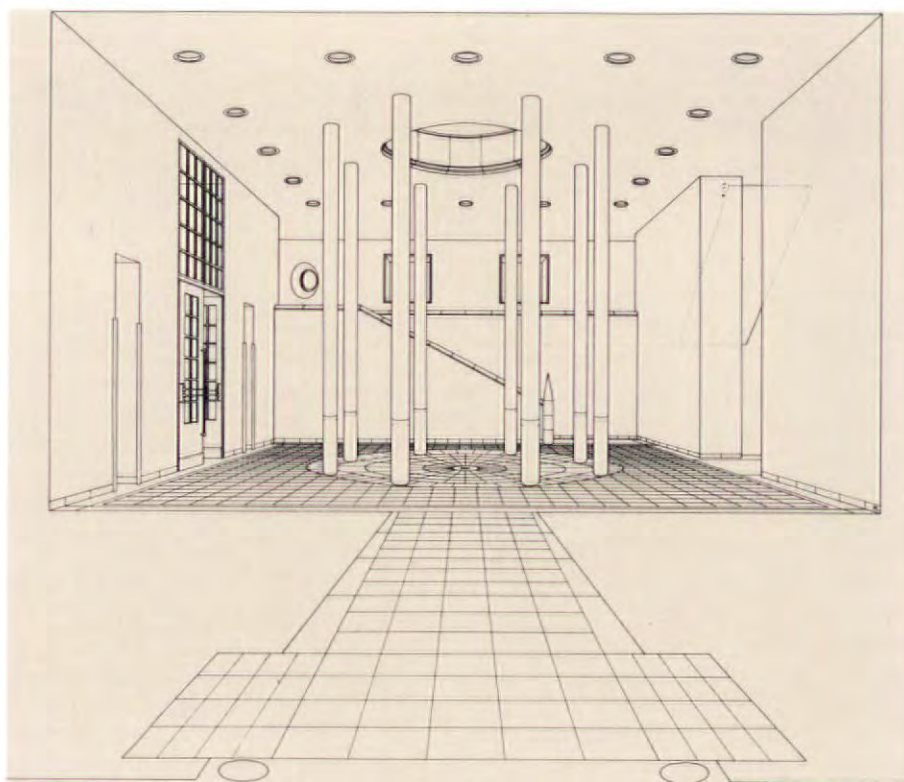
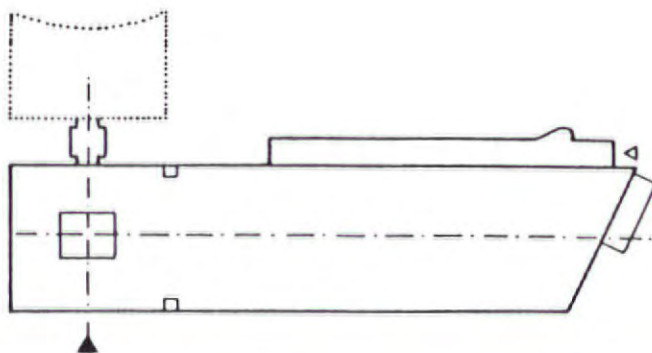
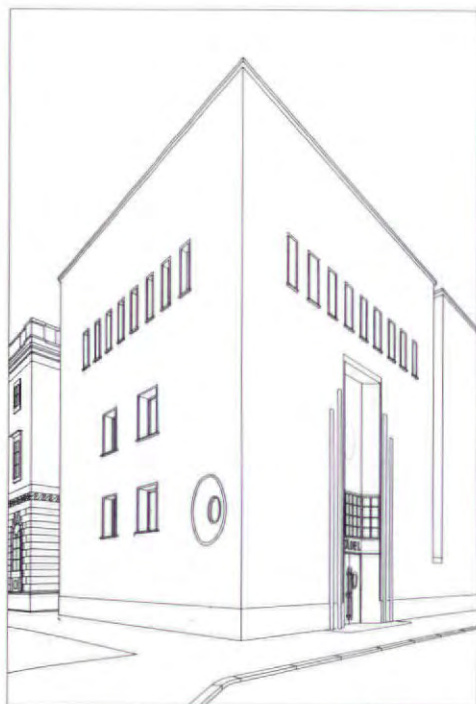
Apartment house, 1983.

Städel Museum extension, Frankfurt, 1987-1990

The Städel Museum in Frankfurt has seen much architectural innovation. It was first built in the neo-classical style by the architect Oskar Sommer and opened in November 1878. After World War Two it was rebuilt by architect Professor Krahn. In 1987, a limited architectural competition was organised for the design of an urgently needed annexe to house the twentieth century collection and provide rooms for temporary exhibitions.

Gustav Peichl was the winner and his extension building to the Städel on the Holbeinstrasse opened in October 1990. The jury's decision to award Peichl first prize was based on the fact that the architect succeeded in "demonstrating continuity of architectural design without reverting to an historical language. It is a modern building that is economical with its motifs".

The three-storey annexe is structurally adjoined to the existing building via a connecting bridge on the first floor, and skilfully takes into account its proportions and magnitude. Peichl set out to use durable, contemporary materials in creating a structural finesse which does justice to the importance of the Städel Institute of Art. The annexe is clad in white natural stone.

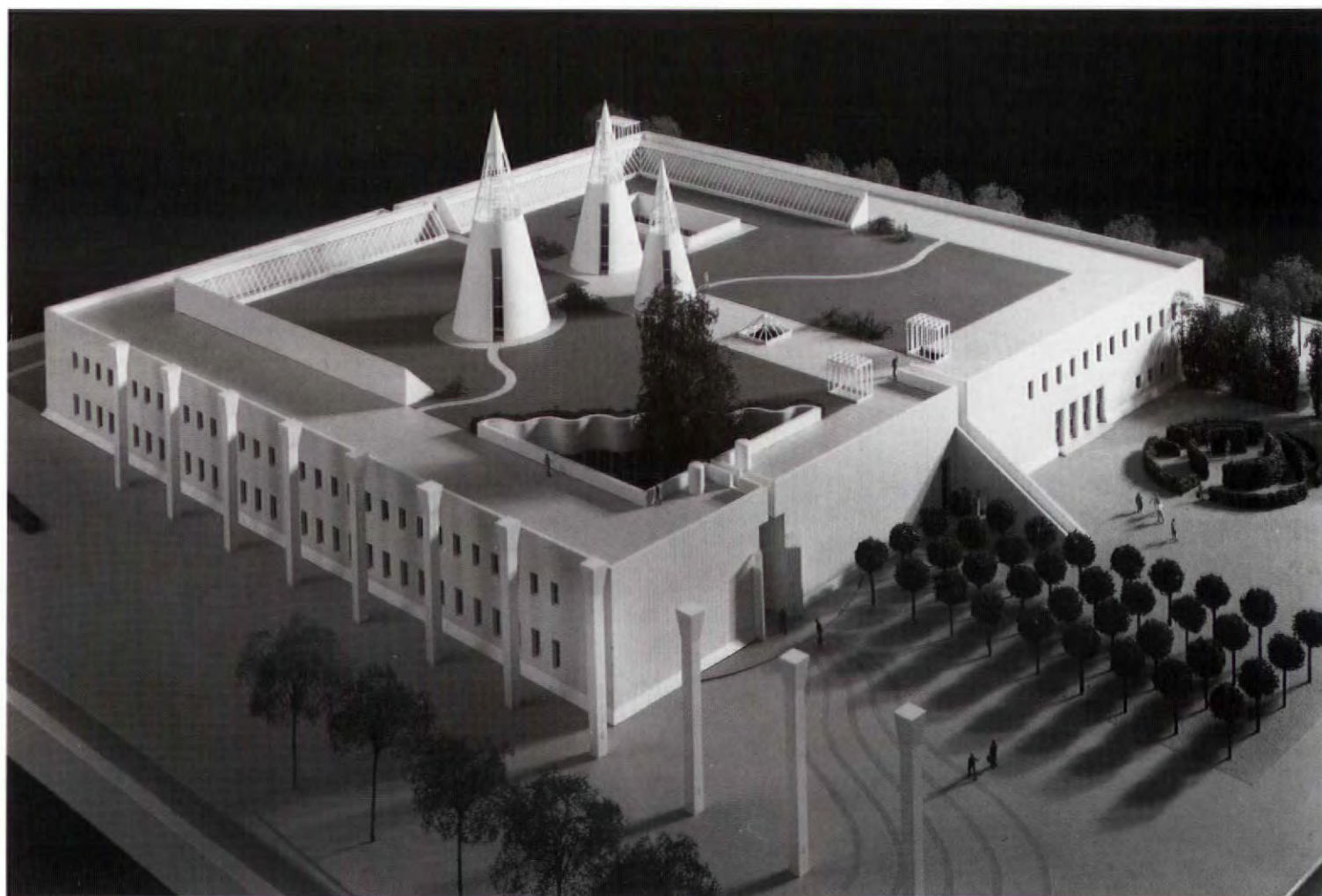
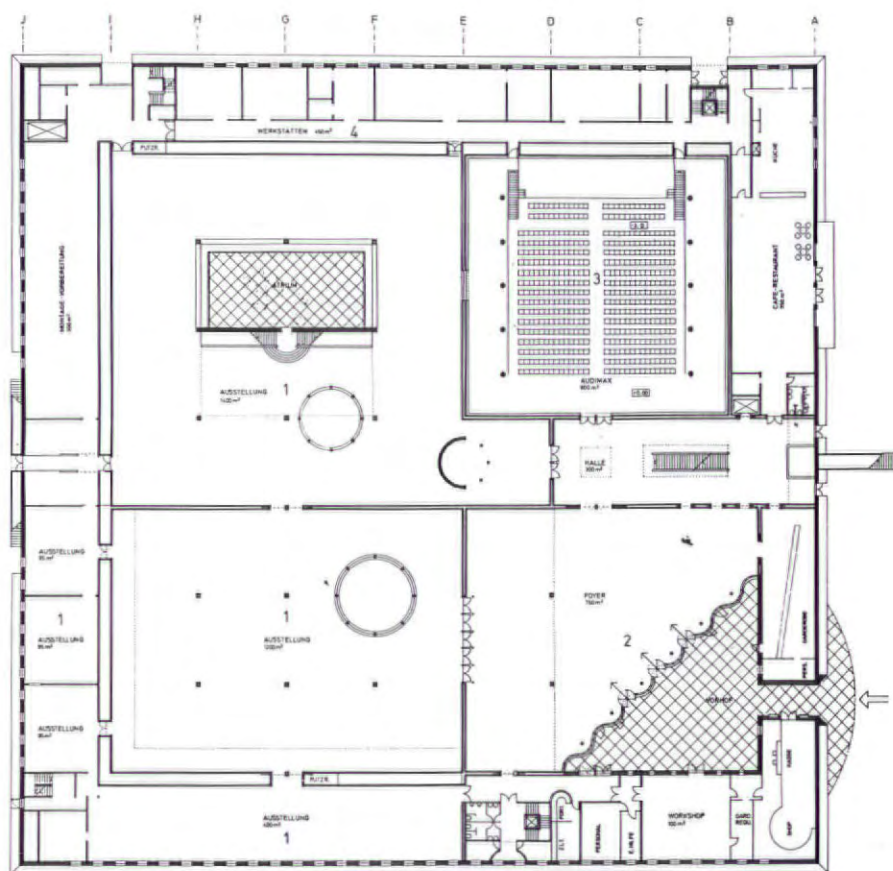


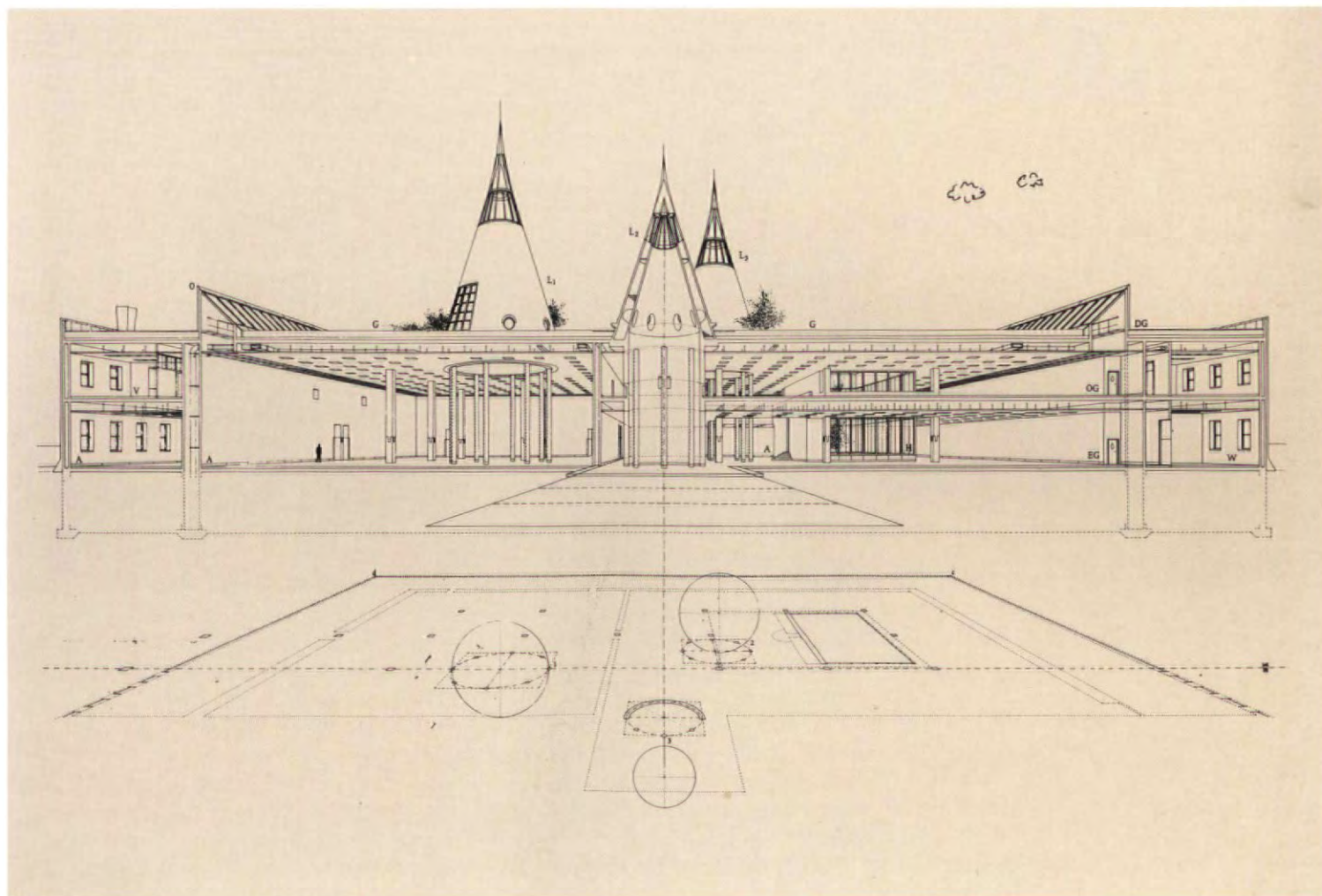
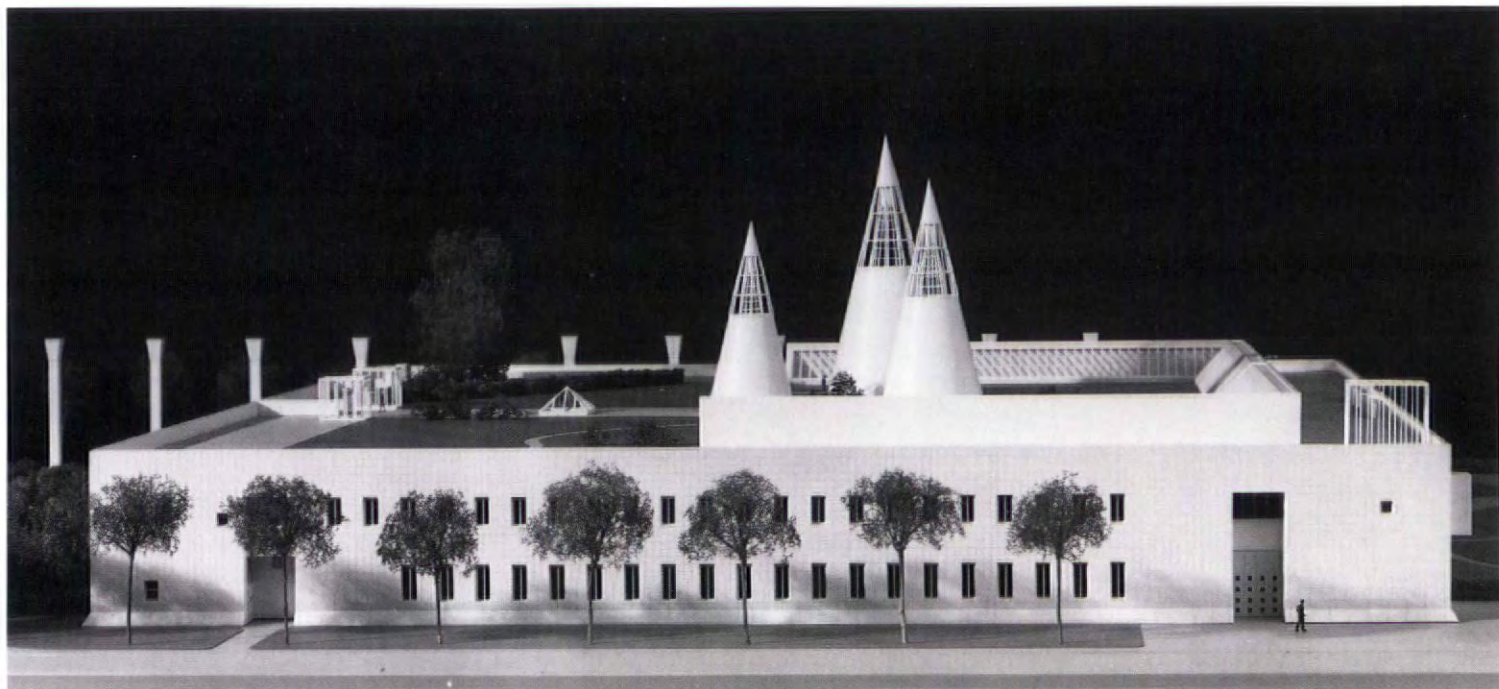


Federal Art Exhibition Hall, Bonn, 1986-1992

Reflecting Peichl's renewed interest in pure geometric forms and classically defined spaces, the Bundeskunsthalle in Bonn places three large lighting "cones" or pointed towers within a basic square shape. Natural light penetrates deep into the building while the spatial concept enables large, medium and small exhibition spaces to be offered simultaneously.

Early modernist thinking is reflected in the use of roof garden on the flat roof as a sculpture garden for the facility.





CREATING USEFUL ART

Gustav Peichl, an Academician of the International Academy of Architects, provides a commentary on his own work in two manifesto articles. The first explores the tension between reason, emotion and intuition in the creative process of designing.

it happening. The impact of a building remains inaccessible to the scientific mind. Yet every day the impact is experienced or suffered, depending on the quality of the architecture. The impact creates harmony and chaos.

Two important personalities of the first decades of our century have influenced cultural and social politics in different ways. Sigmund Freud and Otto Wagner stand for emotion and intuition on the one hand, reason on the other hand. Of course I am not suggesting that the one used only his heart and the other only his brains.

There is one statement I want to put up for discussion. The coming into existence of a plan of a building, that is to say architecture, is neither possible solely through reason, nor solely through emotion. With reason I mean intellect, rational thinking, but at the same time motive and purpose, the intellectually well considered, the scientifically based. By emotion I mean creating through feeling and intuition.

In my opinion this is the capacity of the artistic power of design surpassing mere technical knowledge. Without this power of design, architecture does not seem possible.

With Otto Wagner the principle of construction and the fulfilling of function have become artistic ways of style. Through the blending of modern day technology and artistic imagination, architectural highlights of a special kind are created.

Nobody dares to believe any more that architecture has been counted amongst the Fine Arts since ancient times. The noble argument as to which of the three visual arts – painting, sculpture or architecture – was the most beautiful, was buried a long time ago. The limits are fluent.

So I would like architecture as art not to be primarily about meeting a purpose. It is better that architecture moves the purpose into the right place and thus a real work of art is created, rather than permitting the triumph of purpose.

As a small mental contribution I would like to submit three concise ideas for further discussion:

- Architecture is art. Architecture is the kind of art that is useful.
- Architecture is created in the field of tension between reason, emotion, and intuition.
- Architecture is not made by the architect alone – all creative powers have to co-operate. □

The profession of an architect is an artistic one, hence I deduct that the outcome of his work is artistic too. But I'll begin with a few remarks about the notion of building.

To me the occupation of building is: pondering, putting ideas to work, drawing, constructing and realising. Coming to terms with building is an adventure. Architects are adventurous. It begins with drawing the first line on a piece of paper, it ends with the opening of the building. Sketching is adventurous reflection on paper. I look forward to each "first draft".

The draft does not deprive me of the freedom to change later on in the process of design, or even to take a totally different road altogether. To me, the process of design starts in one's head. I visualize various formal possibilities of giving shape and function. I try to put these ideas on paper as concisely and simply as possible.

Many drafts are discarded, reflections are combined in other ways and, after a certain period of time, checked against repeated drafts. The draft to me is animation. With each project I have at least two pleasures: the first at the time of the first sketch, the second at the completion of the building.

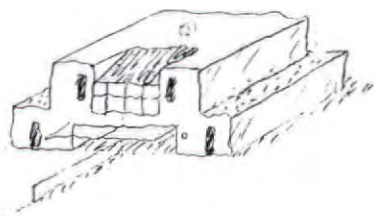
I enjoy sketching, I enjoy drawing, I enjoy realising ideas! Common sense divides intellectual activities into the scientific ones based on reason and into the artistic ones based on feeling and intention. But of all the arts, architecture is the one that makes it least possible to exclude rationality.

A building has to meet pragmatic and constructive conditions that paraphrase, if not redefine, the field in which the imagination of the architect is put to work. To what degree the work of an architect can be termed rational depends less on the application of "rational" than on the importance of these conditions within the whole process of architectural design.

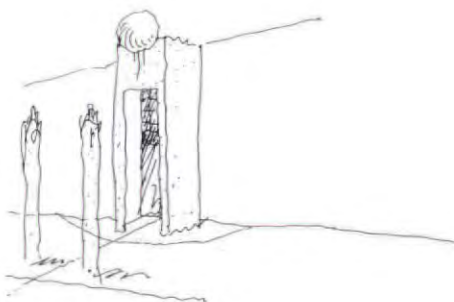
We live in buildings that influence our actions and thinking, without us being aware of



Elementary school, Mistelbach, 1967.



Social housing, Vienna, 1984.



Kunstforum, Vienna, 1989.



BACK TO THE FUTURE

Gustav Peichl's second article deals with the role of functionalism in a future dedicated to the pursuit of a greater quality of life.

Radio satellite station, Aflenz, 1976-79: Peichl reaches the peak of architecture as a manifesto for its own function.

When burning down the Alexandria Library, Kalif Omar pursued the following reasoning: "If writings are in agreement with the Koran then they are superfluous and if they do not agree with the Koran then they are dangerous. In both cases, therefore, they should be burnt."

Logicians cite this as an example of a "dilemma". An architect trying to write about trends in new architecture is faced with a similar dilemma. Of all the contemporary arts it is modern architecture that is probably the most striking. Whether or not it is to our taste, it surrounds us at every turn. It may be bankrupt, it may be banal, it may be boring – and I believe that, for the most part, it is all three – nonetheless it does affect us all.

The process of transformation in architecture is part and parcel of the renewed attention being paid to buildings in the media. The enormous level of activity in the construction sector over recent decades was

largely perceived as an economic factor but not as a cultural one.

In the beginning was the cave. The first person to direct his horde into his cave was the forerunner of us architects. He understood the need to protect himself and others from the elements, wild beasts and enemies.

From that day on, mankind has created his centres with ever-increasing skill, from the Acropolis to the Forum Romanum right up to the Centre Pompidou. The ruins of historic centres allow us to form an image of life in bygone ages. In so doing, we often make mistakes – for example, the one about the "colourlessness of the classical period" of Graeco-Roman antiquity. This error is based on a sensual defect of the Renaissance, or that epoch where this misconception first emerged.

People were incapable of imagining a colourful antiquity and perceived the monochrome as an expression of noble



Peichl's satellite station at Aflenz: an abstract quality of almost mythical origin.

simplicity and quiet grandeur. As if those classical artists, children of the Mediterranean's colourful splendour, could ever have considered the sad idea of abandoning colour as a means of expression! On the contrary: for them, "colour" was an essential means of making space perceptible to the senses.

Interpreting mankind's handwriting

In addition to colour, form and materials are the architect's most important allies. They can make a space seem cheerful or gloomy – depending on whether the architect is in harmony with his allies or intending to violate them.

Architectural styles are mankind's handwriting. In buildings, techniques of function and form rarely coalesce in a pure and unadulterated manner. Functionalism is the fulfilment of function with no regard to aesthetic forms, and formalism is the over-emphasis of form without fulfilling the function.

Architectural creations, like all design constructs, are based on the interaction of purely artistic modelling and technical work. Design-oriented artists like to claim that architecture is neither a science nor an art but a form of expression of design. Perhaps this is true of applied art, but it is not of architecture. Art is totally free in its choice of form and medium whereas design is practical reality and aesthetically oriented.

Current trends in architectural matters will only be understood on the basis of a detailed study of functionalism. The concern of this epoch is primarily centred on function and construction and also on technical development. All these, however, are seen from a utilitarian point of view and sometimes exclusively so. In the future, however, the emphasis of the architect's work will have to shift further towards the artistic side and the values of form and space will of necessity have to be more firmly taken into account.

The structure of changes

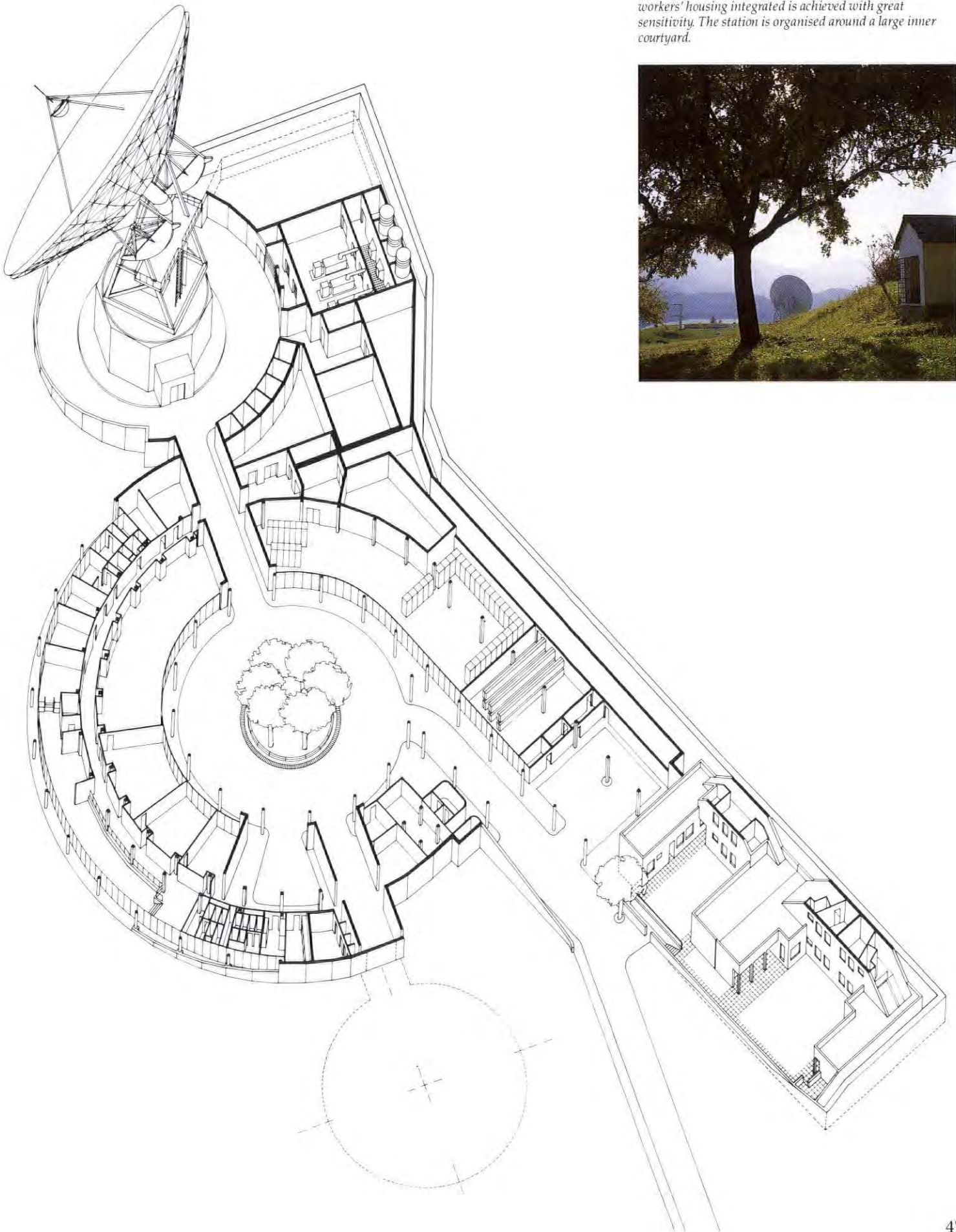
I would wish the subject of architecture to be understood as the structure of changes in our spatial environment.

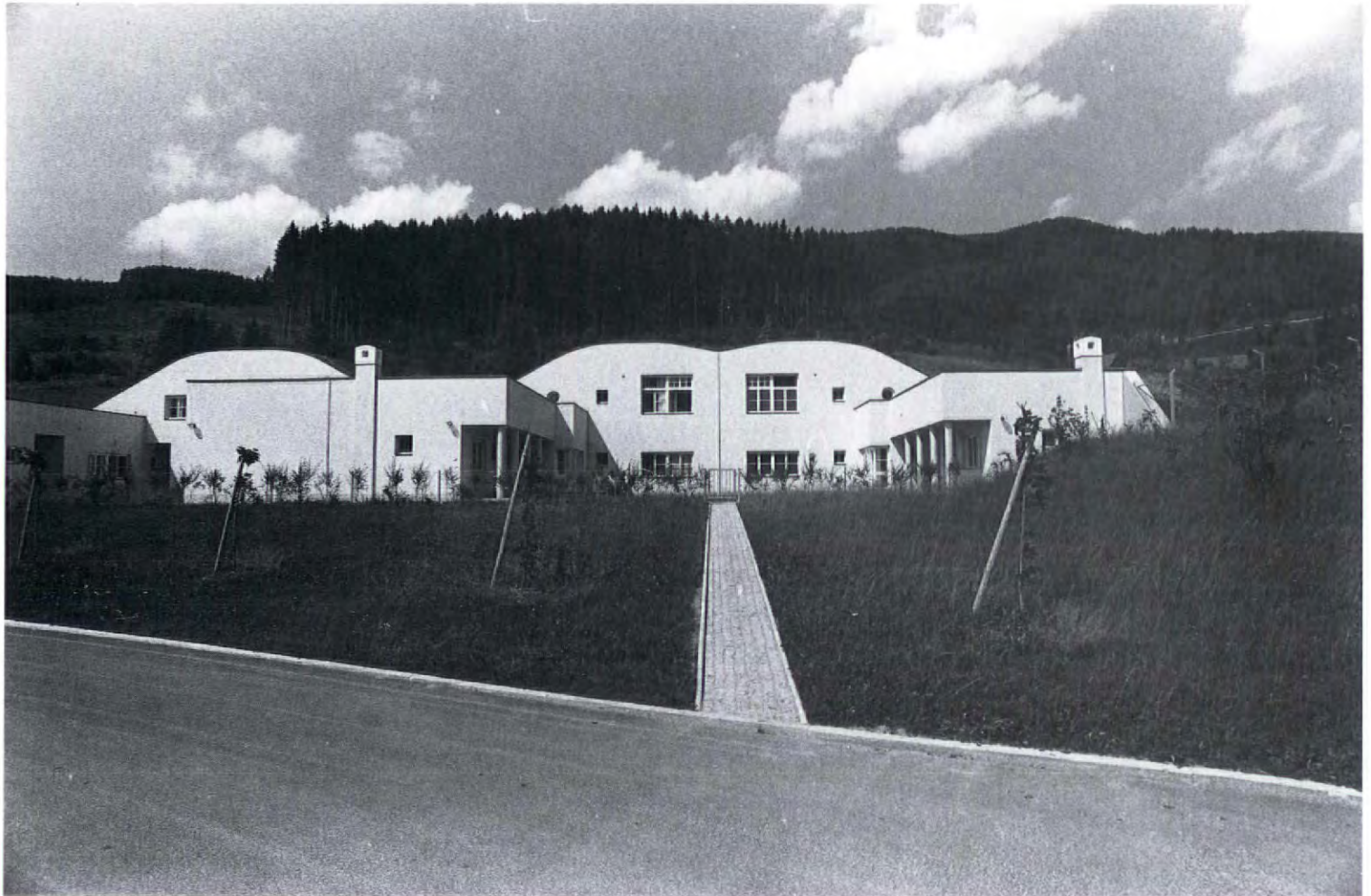
Architecture is always centrally concerned with the spatial purpose that a building is intended to meet as well as its artistic form. It is accepted that the history of modern architecture has been irrefutably determined by artistic personalities and not by "movements" or even "collectives". No movement of an economic, technical or sociological nature could have produced a Villa Savoy, a Barcelona Pavilion or a Berlin Philharmonic.

There is no so-called classical modernism in architecture distinct from the individual creative acts of master-architects. Architecture and construction are the sum of form, function, materials, colour and light. It is right to strive for a sensual architecture, for an architecture guided by Eros. Colour and light move the senses. I regard atmosphere and milieu as a central criterion for any judgement of architecture.

Every building, every architecture is born of a combination of traditional forms and pre-existing spatial conditions. Two components, then, determine the outcome: on the one hand, there is the fresh response to old forms; on the other, the demands made of the building – how many people it needs to

Peichl's symbiosis of landscape and pure technique for the Aflenz satellite station. An underground building with workers' housing integrated is achieved with great sensitivity. The station is organised around a large inner courtyard.





Workers' housing at the Aflenz satellite station: the aesthetic of a building knows no external or internal boundaries, says Peichl.

accommodate, whether it is to serve as a workplace or a home, what function it has. The successful blending of the old and new is a mark of quality both architecturally and in terms of the achievements of town planning.

Function measures quality

It is a building's utility value that is its prime source of life. It is not its pathetic-representative features but its "mood" and the poetry that a building exudes in terms of its true function that is the measure of its quality.

The aesthetic of a building knows no external or internal boundaries, it does not end with the façade, it is not limited to the ground-plan. Instead of a nostalgia for "beauty", I yearn for the "beauty of processes" both within and without the building. The particulars should melt into a fully structured "whole" and combine with its content and role to embody the outward form.

If our spatial environment is not to suffer an increasing loss of sensuousness, our efforts

must not be solely directed to the creation of good architecture. We need to actively protect our monumental heritage in a way that revitalises historic buildings by filling them with a new purpose. We must not only preserve the good old things but also create good new ones.

There is no doubt that interest in historical architecture, apart from its significance in terms of construction, involves emotional elements. The ties to the past, the delight in good building and the harmony of natural structure all contribute to what is termed our "quality of life". Historic buildings enable people to identify with their surroundings and embody a particular atmospheric quality.

These perspectives are gaining in relevance at a time when the architectural structure of the environment is being more influenced than ever before by sociological elements and considerations. This doesn't imply, however, that the importance of an architecture that is independent, self-assertive, new and focussed on the future should ever be overlooked. □

Gustav Peichl: a chronology

Born 18 March, 1928, in Vienna;
Professor at the Academy of Fine Arts, Vienna.
Award of the city of Vienna for architecture;
Austrian State Award;
Reynolds Memorial Award;
Mies van der Rohe Award;
Member Academy of Arts, Berlin;
Berlin Architectural Award;
Honorary Fellow of the Royal Institute of
British Architects;
Honorary Fellow of Bund Deutscher
Architekten.

Bibliography

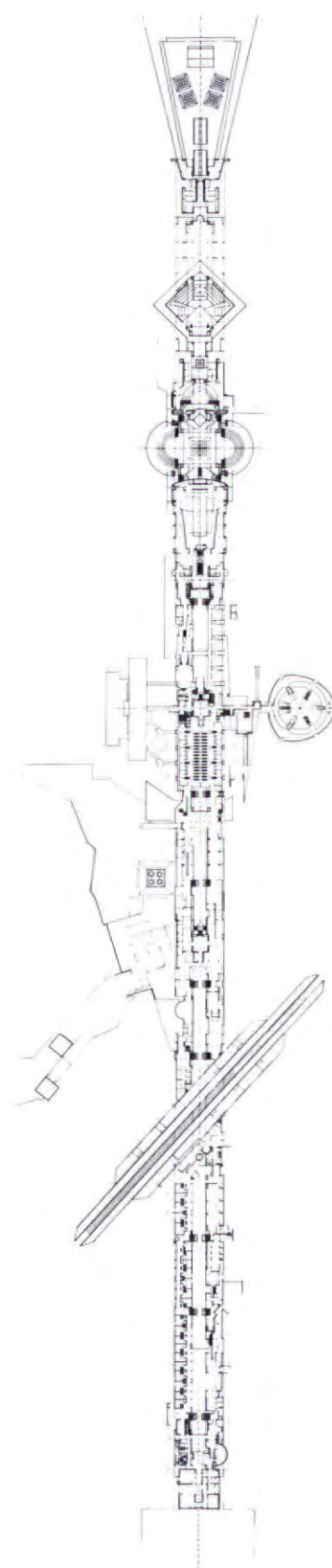
Architektur und Technik, Edition Tusch, 1979
Gustav Peichl – Bauten, Projekte, Meisterschule, Edition Tusch, 1981
Drei Wiener Architekten/Three Viennese Architects: Wilhelm Holzbauer – Gustav Peichl – Roland Rainer, exhibition catalogue edited by August Sarnitz, Edition Tusch, Vienna, 1984
Im Zeichen des Kreises, Verlag Hatje, 1987
Gustav Peichl, Gustavo Gili Editorial SA, Barcelona, 1987
Gebaute Ideen, Residenzverlag, 1988
Franco Fonatti, Gustav Peichl – opere e progetti 1952-1987, Electa, 1978
Architects are only artists. Verlag Ernst & Sohn, 1989

Buildings & Projects (selection)

1960-1962 Residence in Vienna-Grinzing at Himmelstraße
1961-1963 Elementary School, "Krim", Vienna
1962 Interior design of "Caravelle" airplanes for Austrian Airlines
1962-1964 Austrian Pavilion, World's Fair, New York
1963 Central Office for Austrian Airlines in Sofia
1963-1964 Municipal library of Vienna-Döbling
1963-1965 Convent, Vienna
1965-1967 Rehabilitation Centre in Meidling, Vienna
1967 Audiovisual School in Mistelbach
1968 Austrian Pavilion, Fair at Helsinki
1968-1972 Studios for Austrian Radio (ORF) in Dornbirn, Innsbruck and Salzburg

1973 Austrian Broadcasting radio antennae, Vienna-Kahlenberg
1973-1976 Urban development plan for Vienna-Grinzing
1975 Biennale di Venezia, adaption of "Molino Stucky"
1976-1979 Radio Satellite Station in Aflenz
1978 Urban project for Stuttgart, "Wulle-area"
1979-1983 PEA, Phosphate elimination plant in Berlin-Tegel
1979 Library for Karlsruhe, project
1979 Austrian Broadcasting stations, extensions to Linz, Salzburg, Innsbruck, Dornbirn
1979-1981 Studios for Austrian Radio (ORF) in Graz, Eisenstadt
1980 Urban Project for Munich, "Armeemuseum München"
1982-1983 Archives for Austrian Radio (ORF) in Argentinierstraße, Vienna
1983 Competition for Technological Museum Mannheim
1983 Design for the Papal visit to Vienna
1983-1988 Social housing, Berlin-Tegel
1984 Social housing, project, Hutweidengasse, Vienna
1984 Elementary School, Diesterweggasse, Vienna
1985 Social housing, Humboldtplatz, Vienna
1985 New Technological Centre in the Pirelli Bicocca area in Milan
1985 Urban redevelopment project, Hamburg
1986 Elementary School, Wienerberg, Vienna
1986 Redevelopment for the "Ronacher" theatre, Vienna
1986 Art and Exhibition Centre, Bonn
1987 La Città sognata, Bovisa, Milan
1987 Urban project for Albertinaplatz, Vienna (with Wilhelm Holzbauer)
1987-1990 Extension to the Städel Museum, Frankfurt
1988 Competition for Broadcasting and Radio Headquarters, Frankfurt
1988 An Idea for Berlin: The Media Tower
1989 Kunstforum Länderbank, Vienna

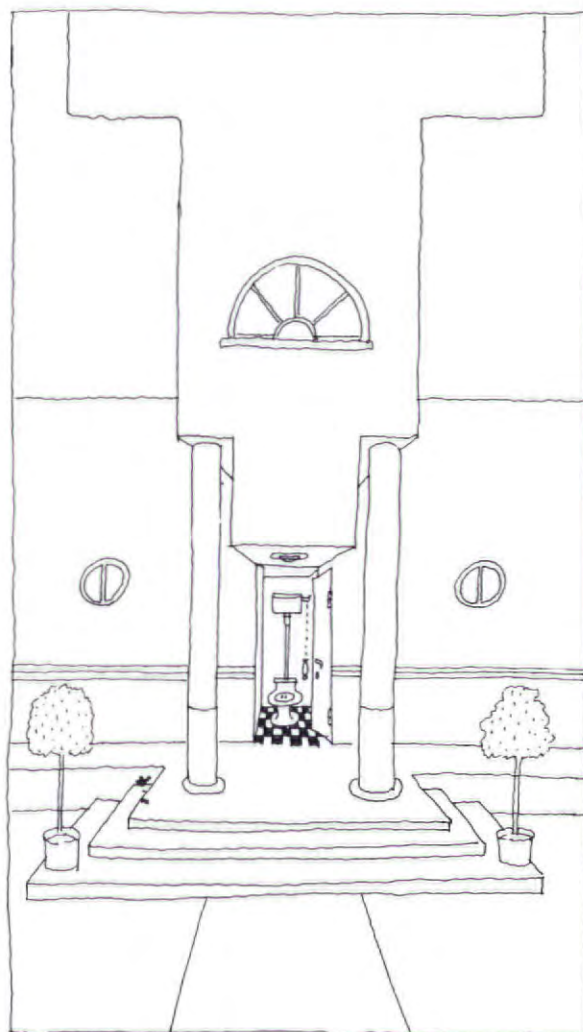
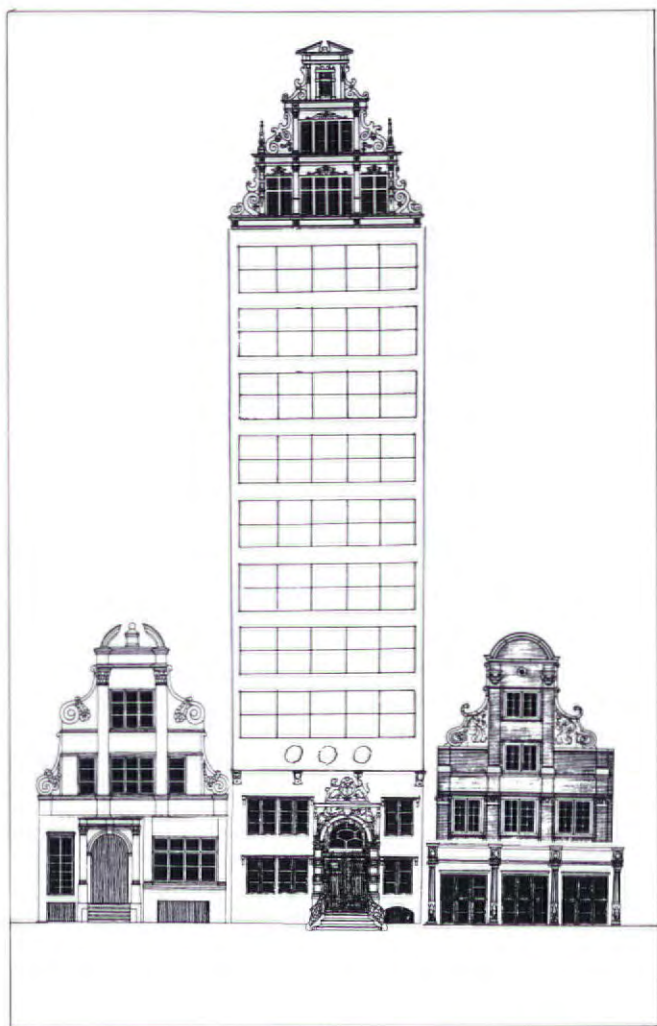
La Citta Sognata, Bovisa, Milan: 1987 Peichl concept to revitalise the Bovisa industrial district of Milan. He sought a "fitting transmission" between urban and suburban areas.



THE IRONIES OF IRONIMUS

Gustav Peichl's alter ego is Ironimus, a prolific satirical cartoonist for Austrian and German newspapers. Louis Hellman, himself a distinguished architectural cartoonist, looks at the apparent contradiction of an internationally renowned architect satirising the follies of a contemporary scene of which he is a part.





The myth of the conflict between common humanity and oppressive technology has long been a catalyst for humour, from Chaplin's "little man" struggling against the machine to Jacques Tati's Hulot pitting his anarchic naivety against the rationally planned environment and exposing it as a surreal nightmare in the process. The myth has, of course, provided much material for satirical cartoonists who see their role as representing "ordinary people" against established authority.

But what happens in those cases where the satirist is also part of what is being satirised, the professional who lampoons his own kind, and in particular the architect? Architects, despite the original goal of the Modern Movement to serve the whole of society rather than the old privileged elite, are popularly bracketed with politicians, bureaucrats and developers, as those who secretly impose their will on the rest of the populace.

Modern architects have adopted the dual

role of technocrat and avante-garde artist without attaining the power of the one or the romantic glamour of the other, but receiving the opprobrium attached to both. While the public has an ambivalent attitude to the professions generally, because architects deal in abstract conceptualising rather than people's needs they have no popular *positive* image as do the medical profession, lawyers, vets or the police. There are no TV drama series about architects.

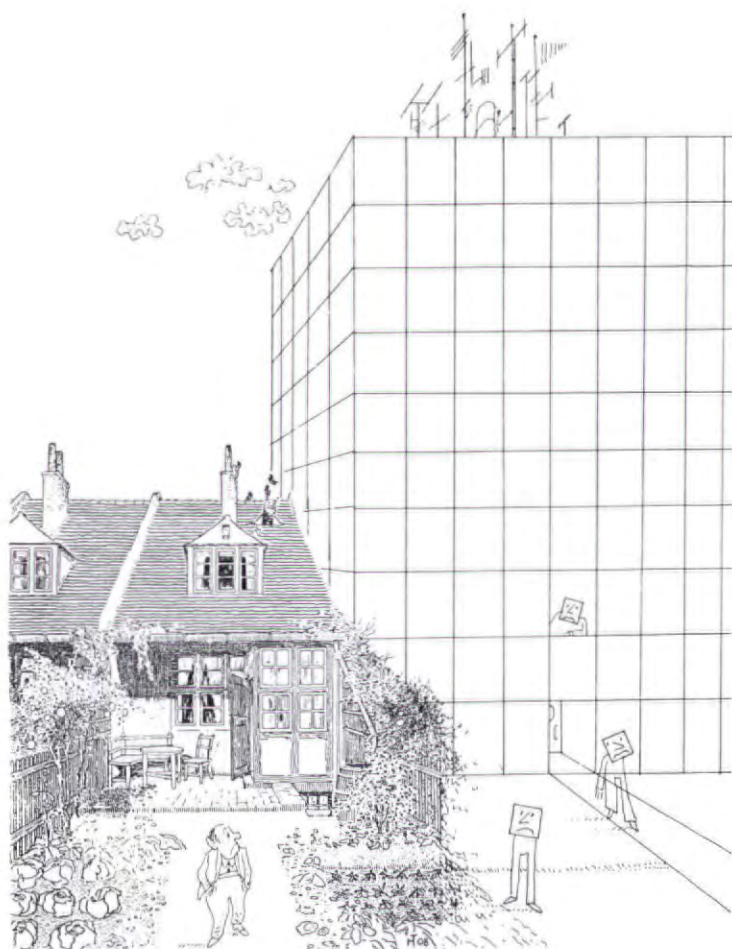
Epitomising a dichotomy

The architect cartoonist epitomises the dichotomy inherent in modern architectural practice. The desire to serve society conflicts with the popular image of the architect as being on the side of "them". Added to this is the resistance of most people to being planned, tidied up and organised, and all architecture, whether it be Miesian or Gaudiesque, is about creating and imposing order.

Gustav Peichl under the *nom de plume* of "Ironimus" is such an architect cartoonist and his work certainly displays schizoid tendencies. The very use of an alias perhaps demonstrates the Jekyll and Hyde nature of his persona and probably helps the transition from one to the other. Peichl informs Ironimus but the traffic seems to be all one way.

Ironimus has been drawing cartoons for the Austrian newspaper *Die Presse* since 1954 and has provided a political comment for the *Suddeutsche Zeitung* every week since 1968. The role of the political cartoonist is to deflate and ridicule the pomposity of our leaders, to be a vigilante of democracy deploying one of the most important human defence mechanisms – humour. But an architect of international stature who satirises his equally famous contemporaries presents an immense contradiction.

Unlike the political cartoonist, the charge may be levied, "OK, so what do you do that's



much better?" Peichl's buildings certainly do seem to do better. They have an architectonic clarity and three-dimensional integrity, being simultaneously high tech and complex without resorting to post-modernist devices. From such a stand-point, Peichl's cartoons can mock the dilemmas of the post-modern stylist, the fashionable and the shallow.

But his own buildings are not "humorous" and his cartoons, as Stanley Tigerman points out, "present a hopelessness to which his architecture doesn't even vaguely allude..." There is, in a word, a dark side to Peichl not apparent in his architectural production. Since all art is a portrait of the artist, both aspects reveal something of the man.

Confusion of directions

The cartoons in Ironimus' latest collection *Architects Are Only Artists* have roughly three themes. Firstly, there are ironic generalisations on the dilemma of the contemporary architect,

the loss of nerve and the confusion of directions. These themes are exemplified in his splendid collaged buildings-as-hats series. The "style-generating architectural entrepreneur" tries various historical styled tops to enliven his sterile office block, while "the technocrat architect" is trapped in his gridded cage.

In "Quo Vadis", the architect figure burdened with a load of fashionable styles confronts a multi-directional signpost pointing to the trends, while "Architecture Made in Germany" consists of huge stamps for turning out simplistic post-modern elevations. At the same time the "Deconstructivist pack" modifies building plans into vicious predatory dogs.

Secondly, there are the satires on the well-known architects. Behind the deceptively whimsical line drawings, barbed points are being made. An Ungers' skyscraper forms a tombstone to a grave (post-modernism?) Richard Meier is depicted as a cardboard figure. SITE are "Second BEST". Hollein is a

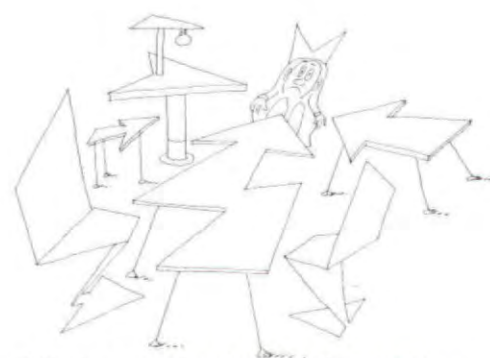
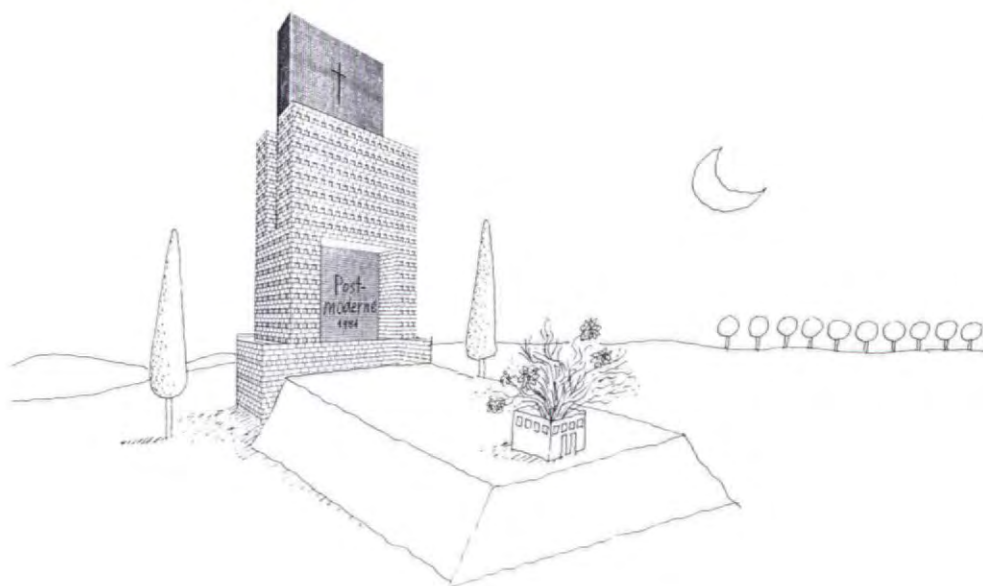
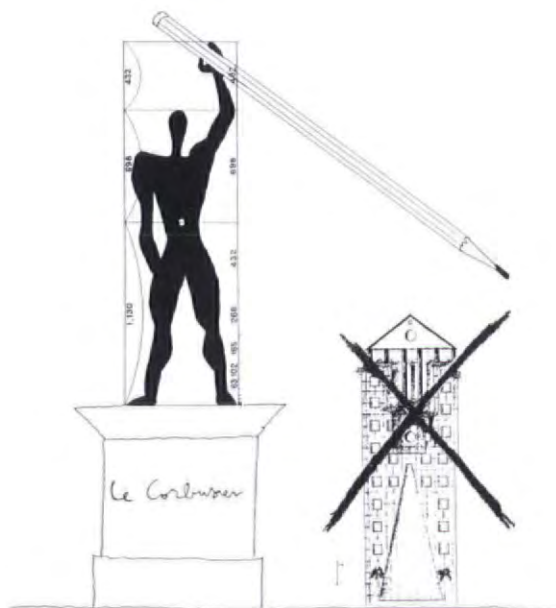
speak-no-evil monkey climbing one of his bronze travel agency palms, while his latest building is a piece of half-eaten confectionery.

Rossi is a pierrot with a gondola laden with bric-a-brac. Venturi is a fashionable designer of furniture. Charles Moore is a lout in a Piazza d'Italia t-shirt. Big Jim Stirling is a peddler of newspapers. Michael Graves is a clown. Hedjuk is a showman, Koolhaas a strutting, preening, exotic bird and Natalini tries to ensnare a human in his gridded net.

Avoiding philistinism

These are comments about architects for architects from a position of understanding. Thus they avoid the silliness, ignorance or philistinism which so often characterises comments on architects by "lay" cartoonists or Princes of the Realm.

Their style underpins their seriousness, being out of Steinberg via Klee. In other words, cartoons as visual puns with minimal captions in



Following a tradition of continental humorists: Lifestyle (above); The Memorial to Unger (left); Homage to Le Corbusier (top).

the tradition of Continental humorists such as Steig, Siné or François. The humour is not English, but some characters are reminiscent of Edward Lear's drawings. The drawing style is consistent, pure line combined with collaged architectural drawings à la Steinberg. The recognition of limitations liberates Ironimus into his own fantasy world.

For me, the most successful and universal is the third category on the theme of humanity versus modern technology. In "Messalina and the Lascivious Technician", a machine plan headed architect interferes with a Beardsleyesque erotic figure, while the "Architectural Bomber" spatters the countryside with lumpen developments. Curiously this latter piece and the "Architectural spider" are the only comments which might be said to satirise the political nature of architecture and the architect's role as a tool of destructive agents.

"The Old Penthouse", "Tempora Mutantur",

"Longing", "Nostalgia", "The Mobile Fetishist" and "Villa of My Dreams" all portray a nostalgic longing for the old and comfortable in contrast to (sterile and soulless?) modernity.

Do such comments reveal self doubt on Peichl's part, or are they satirising sentimental nostalgia? The ambiguity, epitomised by the antique shop full of 1980s post-modern artefacts, allows us our own interpretation.

Hans Weigel has drawn attention to the similarity between the name Ironimus and Hieronymous (St Jerome) who was famous for taking a thorn out of a lion's paw. Weigel interprets this as Ironimus leaving the thorn in the paw and using a second thorn to preserve both lion and thorn graphically for posterity.

I would rather see the lion as a metaphor for humanity. Whether Ironimus is extracting the hurtful thorn of technology or Peichl is putting it in, or vice-versa, we can never know.

Such is the joy of art, and a cartoonist is after all only an artist. □



CIVILISING ARTEFACTS

The whole Austrian craft tradition from the time of the Werkstätten has established a professional ethic in which architecture and design share a common purpose and moral basis. Carl Aubock, like Gustav Peichl, is another architect and designer who has brought the local cultural traditions alive in an international context. Chloe Colchester and Peter Dormer examine his work.



Aubock's passion for tableware design is significant as the etiquette of eating is at the heart of human culture: Terra Pannonia tea and coffee sets, for the Culinar Series, Ostrovics, Vienna.

Austria has one of the more puzzling modern cultures in Western Europe. Vienna in particular has dazzled the eye with the sumptuous work of Gustav Klimt and the refinements of Otto Wagner, Josef Hoffmann and Kolomon Moser; it has attacked the spirit with pictures of decadence climaxing with Egon Schiele's bleak portraits of himself masturbating; and contrarily it has disciplined modern intellectual thought through the work of masters such as Adolf Loos and Ludwig Wittgenstein.

Modern Austria has delighted us with its sense of domestic order, its disciplined work force, its resistance to pollution – its streets are clean and its countryside free of nuclear power stations.

But Austria has perplexed us by clinging to a President who is shunned by other nations for his dishonesty, and by the suspicion that still too many people in Vienna cling to the dark European habit of anti-semitism. Moreover, the very forces of domesticity and order themselves contain the seeds of their own corruption: in particular the tendency to become intellectually and creatively moribund and belligerently materialistic.

In such an atmosphere every profession needs its own statesmen to carry a torch internationally and to lead the way at



Private housing project at Burgenland: Ahorn residence, Kukmirn.

home: with regard to industrial design and architecture, Carl Aubock is one of Austria's significant elder statesmen.

Aubock is an internationalist, fluent in several languages, and active in several institutions, such as the International Academy of Architecture, whose aim is to bring professional people together to share ideas and solutions to the world's problems. Aubock's interests are housing, urban planning and the environment.

Aubock is a designer and an architect: he is slightly disingenuous when he stresses his craft and artisan training at the expense of his broader education, for he also trained at the Vienna Technical University and MIT (Massachusetts Institute of Technology) as well as in his father's workshop.

Roots in the Bauhaus

Aubock's parents were both students during the first years of the Weimar Bauhaus. His father's family had been involved with the Wiener Werkstätte and influenced in their own work by the arguments and aesthetic ideology of Adolf Loos. They ran (as Aubock and his wife still run today) casting workshops producing, among other things, door handles. Carl Aubock was thus brought up with an artisan/craft/small business ethic

tempered with a liberal arts outlook.

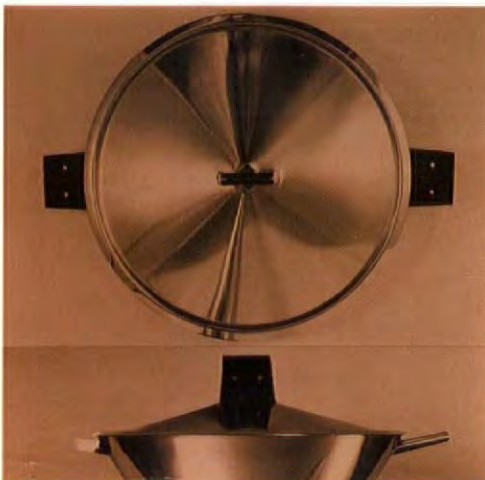
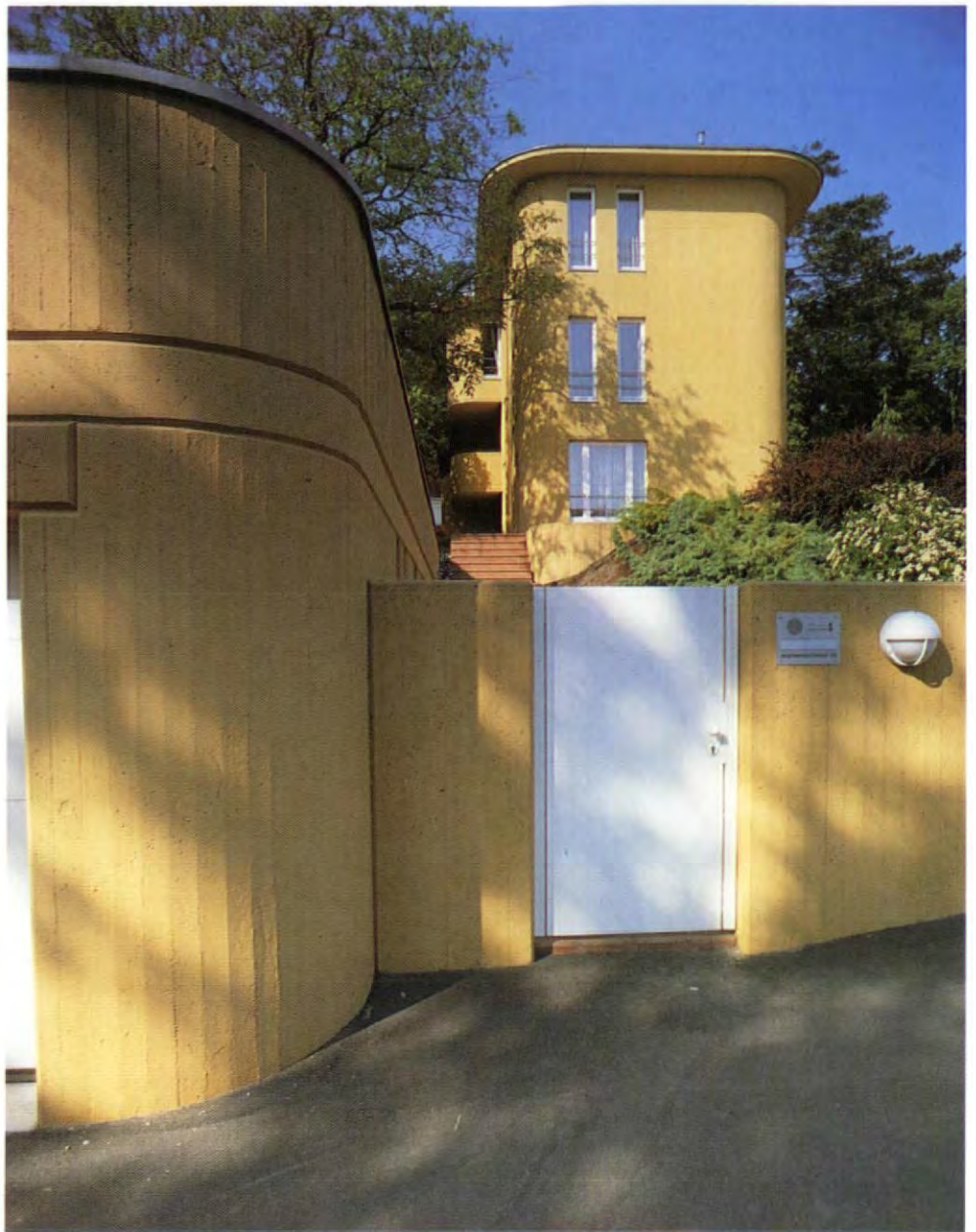
The ideology of handcraftsmanship which Aubock frequently declaims can be misleading to those of us who have been brought up on the modern Anglo-American tradition of *studio* crafts. Studio crafts – pots, textiles and furniture – are quasi-art objects. It does not matter very much whether or not they function very well because they are bought as art objects and they are sold as art objects. Indeed, even skill is a secondary consideration in some studio crafts, such is the corruption of the movement since its arts and crafts heyday of the turn of the century. Aubock's understanding of craft is different and closer to that of the small manufacturer who is both a craftsman devoted to aesthetic integrity and a businessman in competition with other businessmen.

The ethos of the small business fascinates Aubock. He says, "Austria is a small country in which a large part of the gross national product is earned by small and middle-sized businesses." This, together with his own family history, is the context in which he pursues his roles as a designer and as a university professor of architecture and design. He stresses the need for the designer to be expert in materials and production processes whilst also knowing how to collaborate with



Stainless steel cutlery designed for Ambosswerk, Nuezeug, Austria.

Aubock's interest is in problem-solving and service to others, not egocentricity: Wirth residence, Bad Vöslau NO, Austria.



Stainless steel pans for Ambosswerk, Neuzeug.

technologists, marketing specialists and advertisers.

His own industrial design work began with steel cutlery and glassware and it has embraced ceramic, metal and plastic tableware, as well as sports equipment and scientific instruments. His architectural career began first with a commission to design a school dormitory and then to design prefabricated parts for housing.

Since then he has designed a mixture of private and public housing projects, shops, stores and private offices. It is entirely suitable that such a well-mannered man should also have been commissioned for a number of diplomatic briefs such as the Austrian Embassy Residence in Tel-Aviv, and various foreign embassy conversions in Budapest.

Culture of eating

The essence of Aubock as a designer is conservatism and orderliness. His especial passion for tableware is significant because domesticity and the etiquette and rituals of eating are at the heart of human culture.

Sometimes this passion takes a faintly obsessive turn. For example, Aubock has designed a combination glass which can be filled up for beer or long drinks, but its lower part is shaped to receive red or white wine in respectable doses. "Otherwise", says Aubock, "a gourmet host has so many glasses that there's no room for him in his own home."

What interests him about designing tableware is, "The complexity concerning function, material, and technology which are combined with aesthetics, iconography, the habits of conviviality and the way manners change". Quite so. In the modern middle-class home *sans* servants, the husband may be doing the cooking but too often it is the hostess who is kept distracted from the conversation by the demands of the kitchen. Aubock has been concentrating on ways of keeping his wife out of the kitchen while she's entertaining.

He has devised a simple enamel pot in which the hostess can cook a soup or a stew and which has a metal overhead handle, with which she can carry it to the

Housing project, Per Albin Hansson, Favoritenstrasse, Vienna, with Wilhelm Kleyhons.



Housing project, Vorgartenstrasse, Vienna, with Adolf Hoch and Hans Rossler.



dining table using just one hand, after substituting a wooden cover for the enamel one. "The wood lets out the steam and she can serve directly from the pot at the table and have much less to wash afterwards," he says.

Problem-solving approach

Aubock's approach to design is direct: he puts his energy into solving problems and fulfilling design's most important function – service to others. He is not interested in the complex interchanges of metalanguages about style that preoccupy so many designers (especially the Italians). He thinks such concerns are frivolous, even unethical. He dislikes egocentricity in design: he believes that concerns about stylistic gesture hinder the designer's professional performance because the designer is seduced from solving problems by the need to compete in *avant garde* games. "I think that any designer who starts designing with the aim of creating something 'important' but fails to give his best, is ridiculous and acts in bad faith." □



Stainless steel cutlery, Culkinar Series for Ostovics, Vienna.

SEAT OF LEARNING

The ancient library at Alexandria in Egypt was once at the cosmopolitan hub of the world, housing all its knowledge. Home to the great thinkers of the time, it was consumed by fire and earthquake. Now an international team of architects is planning to revive the Bibliotheca Alexandrina. Here, Craig Dykers and Cordula Mohr of Norwegian architects Snøhetta describe the context and intention of their design for the new library – which won first prize in a recent UNESCO competition.



Weighing up a sense of history yet exercising an influence on the future: the new library has a complex symbolic role to fulfill.

The new Bibliotheca Alexandrina bears a great legacy that has as much to give to the future as its predecessor gave to the past. It is an institution whose influence spans from the time of Alexander the Great, 2,000 years ago, to the present, and, hopefully, will extend through another two millennia.

The library's architectural objective is a product of its physical and intellectual context. The context helps to structure the spatial characteristics of both the old and new libraries of Alexandria.

The Alexandrian Library, which aims to house a specific collection from Mediterranean cultures throughout history, also has a more idealistic objective: to collect a book from every country in the world. This notion relates the new library to its ancient ancestor whose ambition was to indulge in a type of unconscious information glut: knowledge for power.

Technology can overpower

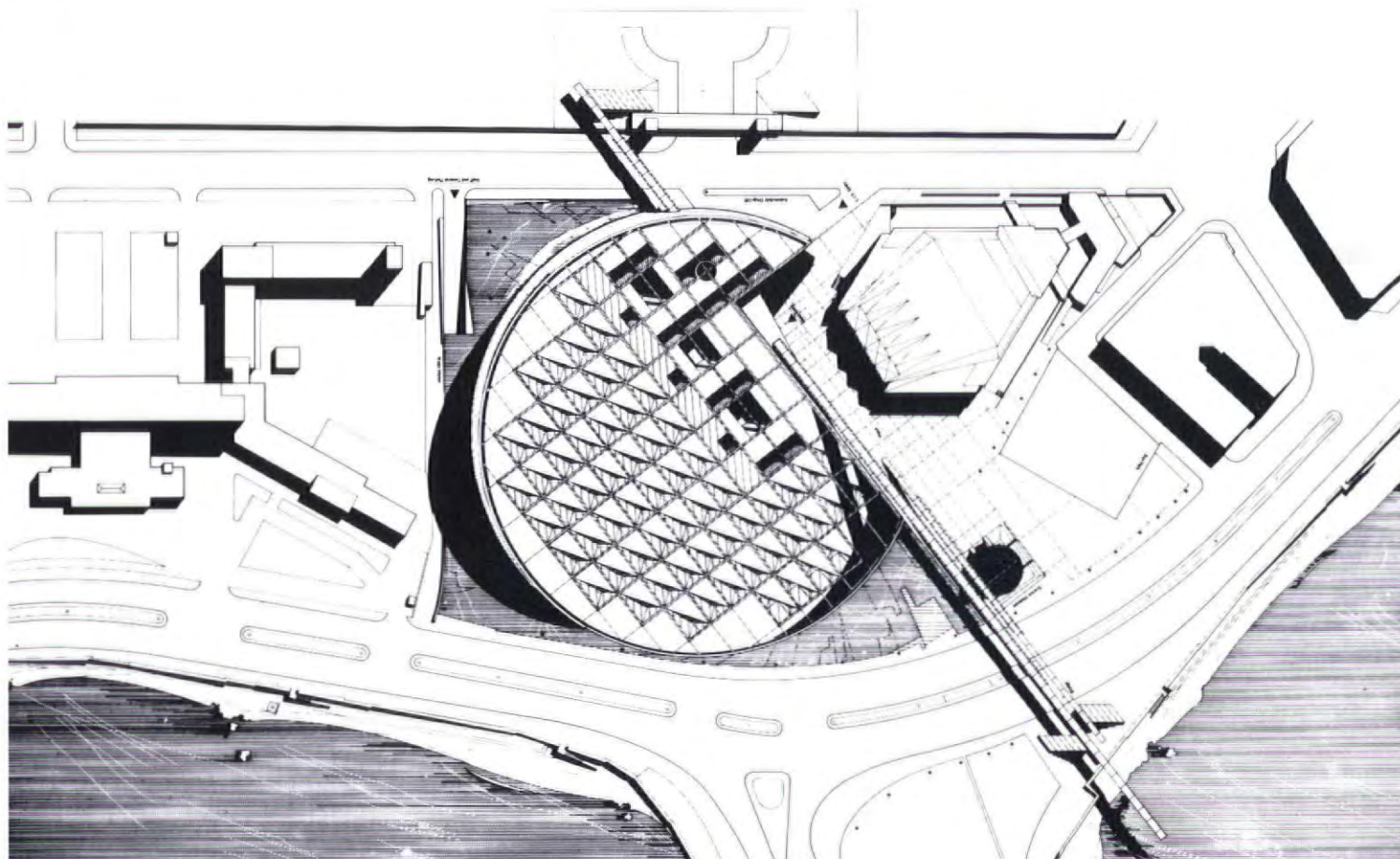
As civilization grows, we are realizing the pretensions of a highly developing society which can remain illiterate. Technology can overpower the importance of the word. A library must maintain the integrity of ideas and authors, with technology as a by-product, not a medium. The new library must not allow technology to erase the memory of our past and the origins of the library itself.

When we think of the torture to which early grammarians, librarians and intellectuals subjected themselves to produce a single book or manuscript, the effort is dispossessing. These people worked in dingy surroundings with little light, feeble inks and degradable papers – papers which they knew would soon become obsolete and decay. Yet they continued their work, perhaps because of the information instinct or perhaps because of a maternal ambition for the future. The new library should, as Oscar Wilde believed, “wear the veil of its past ambitions”.

Weighed down by history

Egypt has become a prisoner of its history, however glorious its past might have been. Much of the world expects the very essence

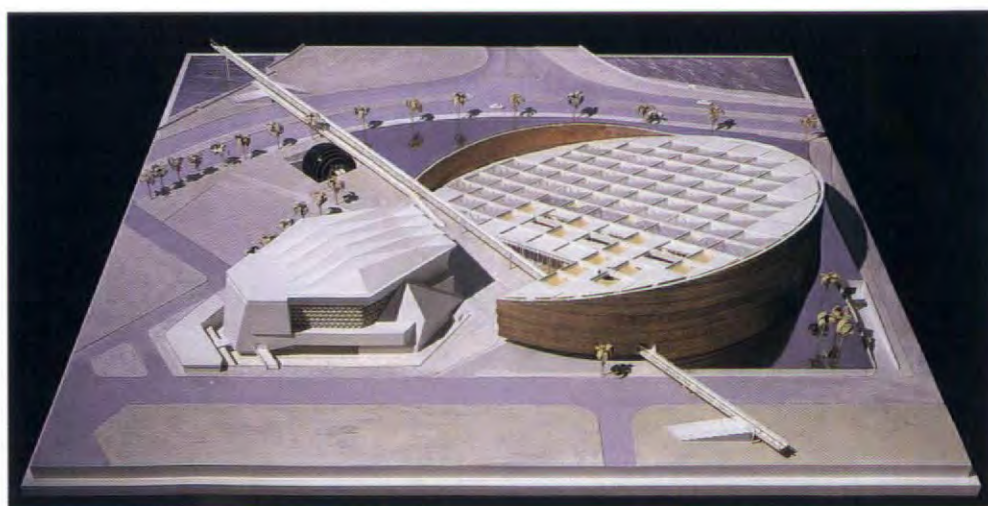
Site plan



of its culture to be found in Egypt and the modern Egyptian is asked to deliver this heritage. He is asked to maintain 3,000 years of development, he must constantly upgrade the Pharaonic principles, and he is expected to spend millions of dollars to rebuild and maintain this heritage despite his local economic misfortunes.

If the new library is to be a link with this richness of cultural history, it must respect this somewhat Kafkaesque struggle which Egypt must endure to be able to live with its past.

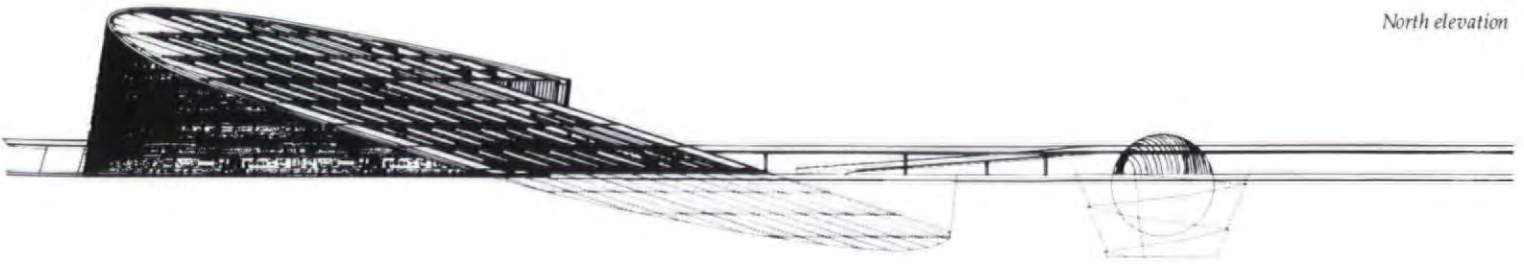
The history of Alexandria is a patchwork of visitations and events. It is a city of immigrants from the Hellenistic Alexander and the Ptolemies to Amr and Arabia. The city has witnessed European, Asian and African cultures. Since Alexander the Great, it has been home to Julius Caesar, Mark Antony and Cleopatra; Napoleon and Mohammed Ali. Its Homeric harbour was once guarded by one of the seven ancient wonders of the world, the Alexandrian lighthouse of Pharos. It is



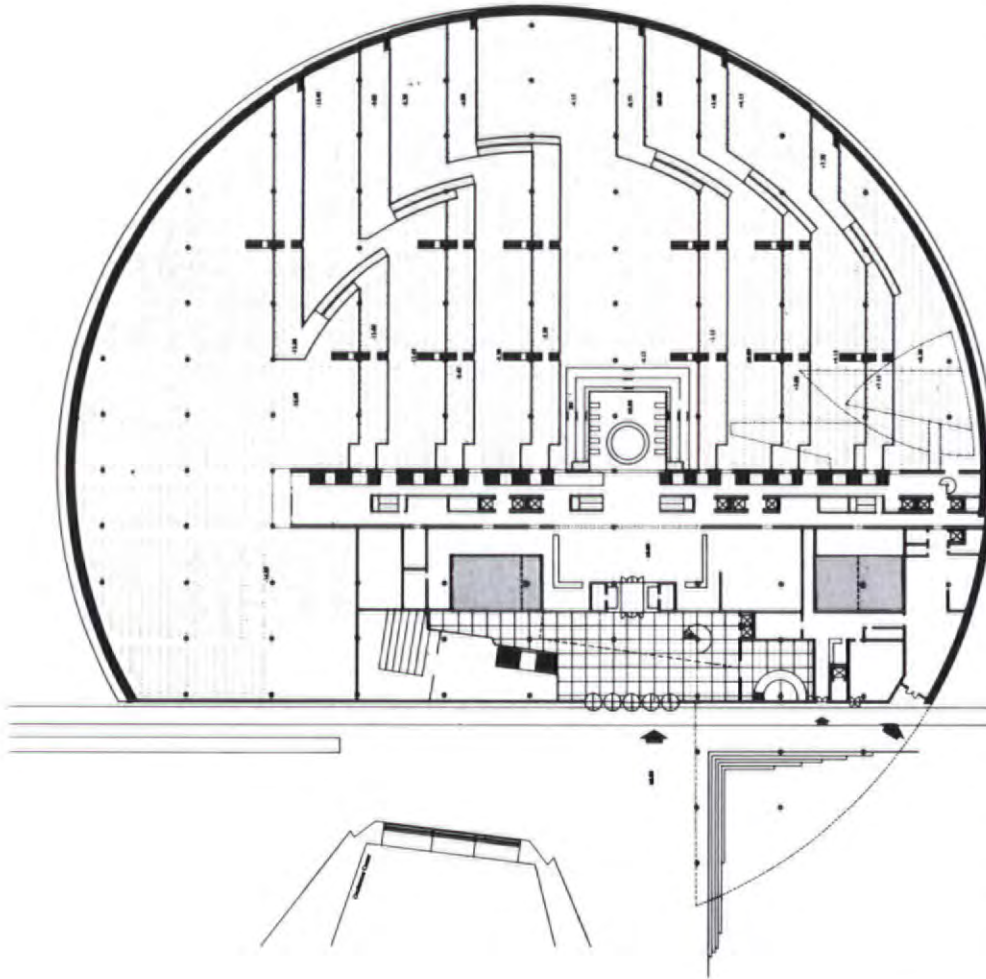
Project details

Total size of the project:	74,000 square meters
Projected completion:	1995
Size of the main library room	25,000 square meters
Number of workstations in library	2,050
Diameter of circle:	160 meters
Total number of floors:	10
Maximum height above grade:	32 meters
Maximum depth below grade:	17 meters
Structural module:	9.6 x 7.2 meters
Total construction cost:	115 million US \$

Pedestrian bridges pierce the great disc to link the library with nearby city centre and university.



Entry level floor plan.



The library hall reveals itself as a cascade of terraced spaces.

this richness which maintains the life of Alexandria despite its stage of development. EM Forster has said in his *Guide to Alexandria*: "The 'sights' of Alexandria are in themselves not interesting, but they fascinate us when we approach them through the past".

The history of the library itself is somewhat of a fantasy. It was in this institution that, for better or worse, our ancestors created the foundations of academic thought which have propelled us for two millennia. It was in the Alexandrian library that Euclid seized the elements of geometry, forcing us deeper into Platonic fortifications. We have now only just begun to remove ourselves from the Euclidian mentality.

The library allowed Claudius Ptolemy to scientifically rearrange the map of the world. However, it also allowed for more

accurate achievements. Two thousand years ago Erasthones managed to determine the circular geometry of the world, giving it nearly accurate measurement. Herophilus established the rules of anatomy and Callimachus wrote poetry while developing a modern library cataloguing system.

The new library then must somehow objectively recognize the achievements of our ancestors without simply glorifying them.

Inherently a monument

The library exists to remind people of an obligation they have incurred, the obligation of history and its influence upon the future. Yet for it to have a significant impact as a monument, it must not attempt to reconstruct its past. Simply because the library has a link with a didactic past, it inherently becomes a monument; it must portray its monumentality in its own originality.

Revival of an institution

The Alexandrian library project is rare in that it is attempting to revive both an institution and an idea. Nearly every academic has his own interpretation of what the original library was and how it disappeared. The final result is however clear; the books vanished and nobody absolutely knows how or why. Yet, at the root of all the disasters which may have overcome the ancient library, are our own human endeavours.

Therefore, providing a space for a new library of Alexandria automatically rests upon innumerable associations. These might originate in the prehistory of the "Bibliotheca Alexandrina" itself, and the fascination Egypt's cultural history contains throughout time. They could be embedded in those experiences and achievements of mankind and in how the outgoing twentieth century represents them. Also, associations could be based upon what a library represents *per se*. Whether associations are based upon individual experiences, cultural mentalities and backgrounds, intentions or locations, the space should inspire, allow, receive, absorb, forward and direct – and so become a vital binding element in space and time.

Intentions of the design

The most striking characteristic of the building is its circular shape. It does not act as part of the homogenous skyline along the corniche and thus its prominence is accentuated. Seen from an aerial view it has the image of the sun.

The vital aspect of this space concept is the shifting of the building on ground level by tilting it into the ground. Therefore, it reflects the forces below the surface in mirroring them above the ground. Cutting through the surface thus coincides with cutting through time. The actual ground one walks upon represents the present. Thus the turning point at ground level marks the point at which present meets past and future.

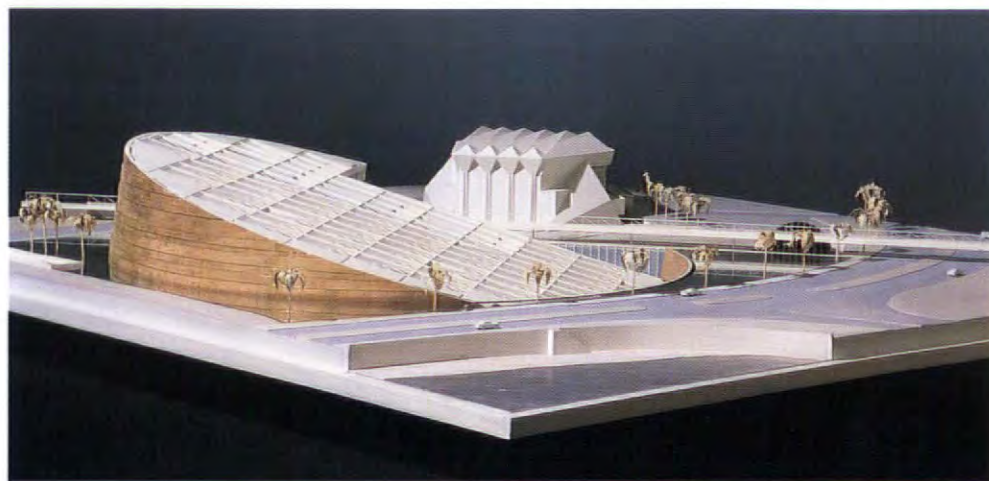
The building inclines towards the sea. It makes itself accessible to the different cultures and traditions of the Mediterranean and those of Alexandria itself.

The tilting motion of the building is emphasized by the curving exterior wall which moves and repeats itself in reverse by rotating inside-out when leaving the ground at the turning point. A positive-negative image is thus intensified.

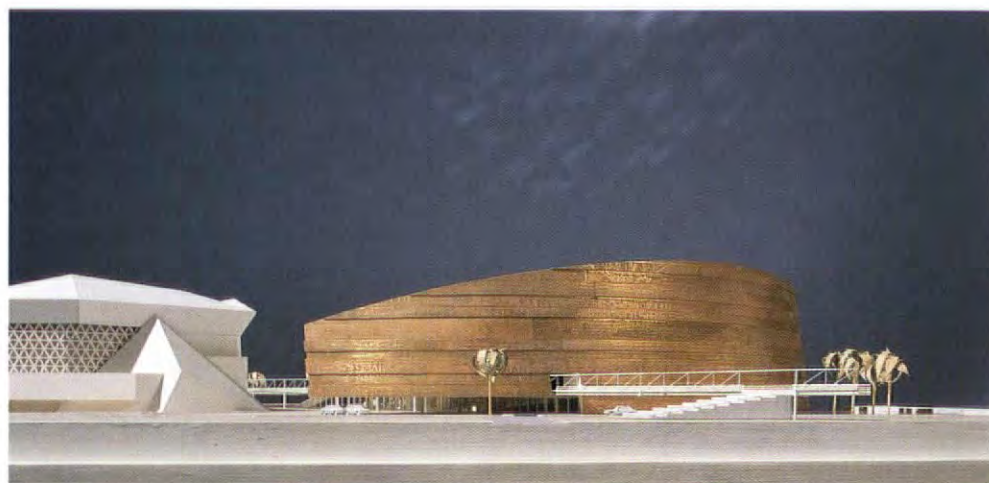
This image is resumed once more in the wall texture as the plane is tilted out of the present, creating layers of time modelled upon patterns arising from nature. Here the layering is filled with scriptures carved in the stone relief. The wall, responding also to light and shade, consists of a positive-negative image itself. Although the wall responds to the tilting by slightly bending, it remains generally vertical and therefore applies to central human preconditions. The scriptures point towards the cultural history initiated by human creativity.

In surrounding the building with water, the ground plane corresponds to the sky by reflection. The reflected image of sun and wall is a fusion of sun, water and earth as essential forces of nature becoming static with the constructions of mankind.

A surface resolved into quadrangles completes the building upwardly. Due to this composition, the emerging grid gives the idea of a complex screen covering the interior space. The arising pattern is produced by solar sails installed at the



North (top) and south elevation of the building. Enigmatic scripture is inscribed on the cliff-like southern façade.



ceiling. This level allows sunlight to diffuse into the interior space. The construction resembles a skin which resolves various acoustic, light and temperature concerns.

Furthermore the roof operates as a connecting link, allowing visual access to the exterior and vice versa. Although this manner of presentation evokes a simple visual pattern, its structural process develops in three overlapping layers. Its organization indicates the building's interior and exterior structure procession, the conceptual positive-negative movement in organizing the sun-shade conditions of the screen itself, and represents the complexity of information contained in the library. The roof may be seen as a "microchip" which dictates the various conditions of interior and exterior activity.

The design of the new library at Alexandria forms a multiple unit in different respects and on different levels,

a fact that could only be suggested in this setting. The library will transform and present itself flexibly through varying demands. The library can call for and inspire any type of association and interpretation, and become a place of contemplation and dispute in every imaginable respect. □

Architects:

Snohetta, Oslo, Norway	
Craig Dykers	USA
Alf Haukeland	Norway
Per Morten Josefson	Norway
Christoph Kapeller	Austria
Oyvind Mo	Norway
Elaine Molinar	USA
Martin Roubik	Czechoslovakia
Kjetil Trædal Thorsen	Norway
Johan Østengen	Norway

Fine art:

Jorunn Sannes	Norway
---------------	--------

Consultants:

Norconsult International	
YRM International	
Habback Associates	

MANHATTAN TRANSFER

Ellis Island, the first taste of America for millions of European immigrants, occupies such a special place in the national psyche that restoration of its historic buildings posed delicate cultural as well as constructional problems for the design team. Graham Vickers in New York looks at how two East Coast architectural practices avoided a theme-park approach to the site.



Ellis Island occupies a unique place in America's national psyche. By no means all US immigrants passed through it – in fact about 60 per cent entered via other points – but for emigré Europeans in particular, it was Ellis Island which came to symbolize the experience of immigration to the United States.

From 1800 onwards Ellis Island was the subject of fragmented architectural development. However, its received image was firmly established in 1900 with Boring & Tilton's impressive Main Building – a grand rusticated façade with four great turrets and a central pavilion, brick-built with elements of granite, terracotta and limestone.

Today it would seem that the building's original effect was quite carefully calculated. If the design of the Statue of Liberty was intended to set the spirits soaring, then the architecture of Ellis Island was meant to project a more circumspect blend of civic welcome, federal gravitas and simple logistical practicality.

After reaching its peak processing day on 17 April 1907 (11,747 immigrants), Ellis Island gradually began to decline in strategic importance – a process accelerated by the US immigration quota system introduced in the early 1920s. Finally the centre was closed in 1954 and Ellis Island was declared surplus property by the US government.

Eleven years later President Johnson designated the island as part of the Statue of Liberty National Monument, but it was not until 1982 that an official body (the Statue of Liberty/Ellis Island Commission and Foundation) was created to look after what had by then become little more than a piece of architectural wreckage adrift in New York Harbor. It would later take two years simply to dry out the fabric of the ruined buildings.

Overseeing the restoration

Two East Coast architectural practices – Beyer Blinder Belle of New York and Notter Finegold & Alexander of Boston – were retained to oversee the restoration of Ellis Island's main historical buildings. This appointment of two firms reflected some degree of official pragmatism, as BBB partner-in-charge John Belle explains.

"I think there were two streams of thought", he says. "At that point in our respective histories (1982), we were two firms who had not established ourselves at the level that we have since. Beyer Blinder Belle had a growing national reputation in the area of historic preservation, while Notter Finegold & Alexander's experience had been in regional adaptive re-use, particularly in the Boston area.

"Although the selection process was done on the merits of the submission, it was obviously going to help the selection committee if they didn't have to face sensitive political decisions such as whether or not the job should go to a New York firm."

The second area of consideration was to do with the sheer complexity of defining the architectural identity of Ellis Island to the satisfaction of the owners (the National Park Service) and the client (the Statue of Liberty/Ellis Island Commission).

"The first impression to correct was that there was a building which was fixed in time," John Belle maintains. "Very, very few buildings exist without change, and in the case of the Main Building at Ellis Island, change had been constant."

Indeed, key events in its busy history include the addition of a kitchen/laundry building and powerhouse (1901); a hospital (1902); a railroad ticket office (1904);



© SHERMAN MORRIS/NFA

The Registry Room showing the dilapidated condition prior to the redesign starting in 1982.

Opposite page: The refurbished Registry Room, Ellis Island: a superb vaulted space suffused with natural light provides the heart of the scheme and an interior sense of occasion which is absent elsewhere.

The view towards Manhattan from Ellis Island: the Main Building with its four ornate, copper-clad towers is just one of 33 buildings on the island.



© PETER AARON/ESTO

The architects who refurbished Ellis Island were ironically faced with the same problem as the original designers of the facility: to accommodate and shelter large numbers of people arriving by boat, 12 months a year.



© PETER AARON/ESTO



© PETER AARON/ESTO

Newly constructed glass and steel canopy greets visitors: metal-painted rust red distinguishes it from the traditional green of original building.

enlargement of the island itself with landfill from the New York subways (1905-6); a baggage and dormitory building (1908); the relocation of the original staircase (1911) and a new Registry Room ceiling constructed with Guastavino tiles (1916-18).

Eventually the architects established a key period upon which to draw: 1918-24. John Belle describes the thinking behind that decision: "What helped us to establish those dates was, firstly, that it was a peak period of immigration, and secondly, elements of the building that were there when we began work had all existed during that period."

A further design factor was that one of the main functions of the restored building was to allow visitors to retrace the route of the immigrant. "To do that we had to put back two very important missing elements," says Belle, "These were the canopy and the staircase."

In fact those two elements now stand as useful emblems of an architectural restoration which a visit reveals to be sensitive, honest and sometimes very elegant indeed.

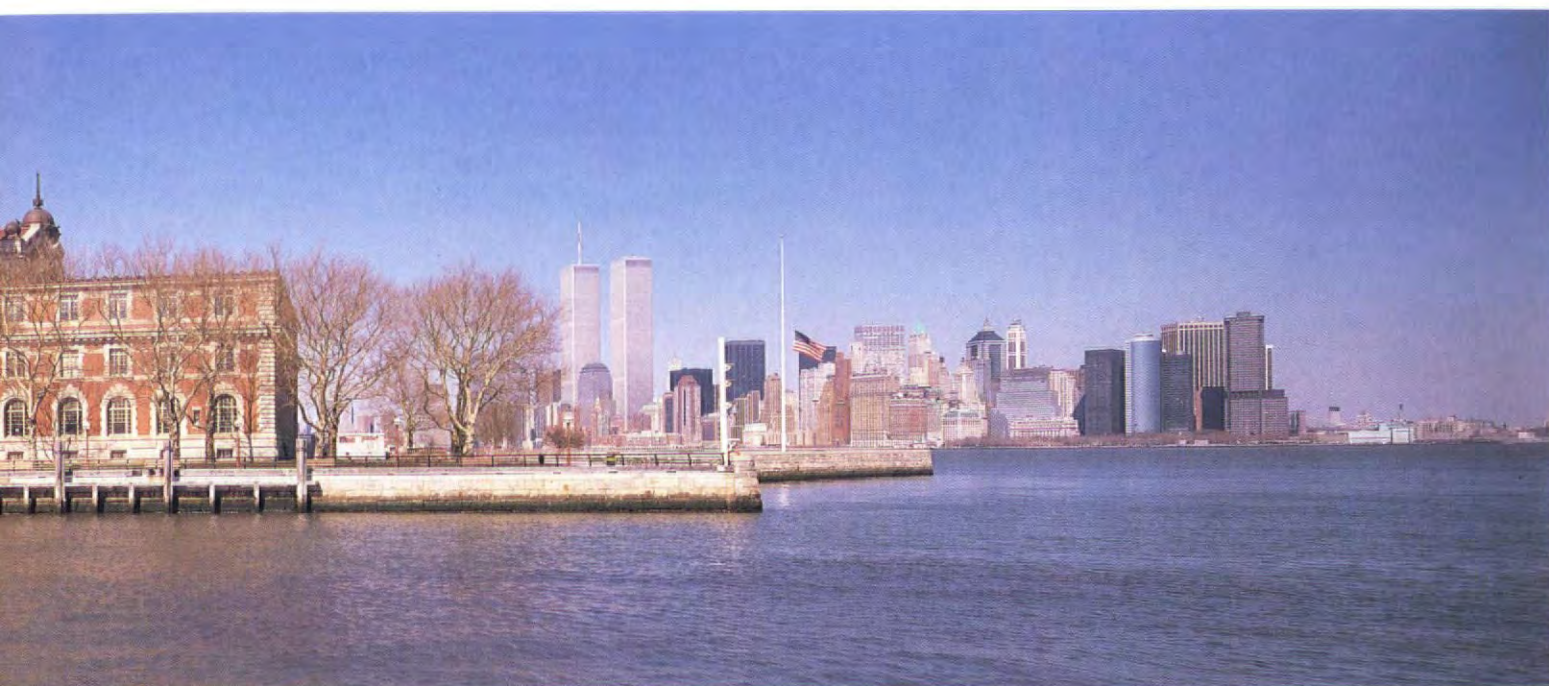
Clear declaration of intent

Reopened to the public in September 1990, Ellis Island's Main Building, its façade steam-cleaned, now welcomes visitors

with a clear declaration of intent: the 114 ft long glass-and-steel canopy is a new construction, its metal painted rust-red to distinguish it from the traditional green trim retained for the original building. The canopy adheres to the footprint of the original (demolished in the 1930s) and its columns are placed where the old ones once stood.

Beneath the canopy, a ramp leads visitors to the main entrance and then into the first major space – the Baggage Room – via a glazed vestibule. The introduction of this vestibule at first seems to make for a slightly fussy welcome, but Ellis Island is exposed to the sort of winds which make it a necessary practical feature if the immigration experience is not to be recreated too closely for the comfort of tourists. Once inside you at least appreciate the vestibule's transparent unobtrusiveness.

Even so, the Baggage Room remains a rather uninspiring space. Perhaps this was always the case, at least after the main staircase was moved in 1911. The staircase's original central placement must have provided a much-needed focus at this level, but – for quite legitimate reasons – the architects have adhered to the 1911 relocation and tucked the staircase away in a corner at the east end of the Baggage Room. This still remains a pity because the new staircase (also unashamedly modern)



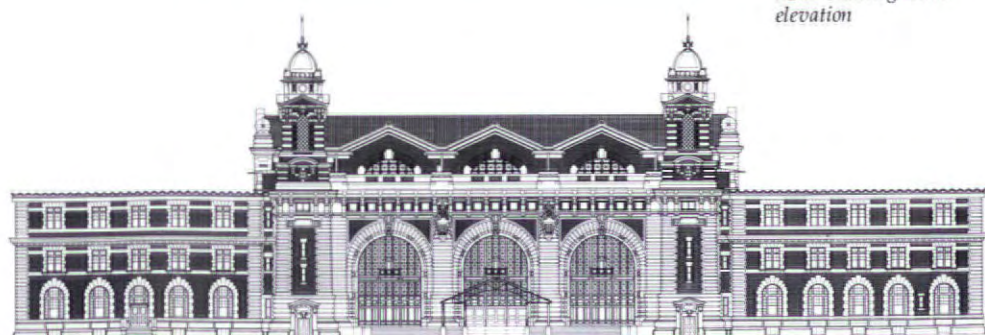
The restoration is only too anxious to openly declare its modern addition: an honesty and integrity of approach has mercifully avoided a phoney theme-park aesthetic.



Main Building south elevation

is excellent: granite, stainless steel and reinforced concrete are used to make a visually very light cantilevered construction which, apparently, even the contractors refused to believe would support itself until it was installed.

Incidentally, in a grimly interesting example of architecture conspiring with medicine, the original stairway was used as an early indicator as to the fitness of the immigrants who had to climb it. Those who betrayed difficulty were immediately





Opposite page: Ellis Island: a blend of civic welcome, federal gravitas and logistical practicality occupying a unique place in America's national psyche.

Dining Room, as it appeared in late 1970s, cleaned up but as yet unrestored.



© SHERMAN MORRIS/INFA

singled out as requiring close medical inspection.

Space suffused with light

The staircase leads to what is really the heart of Ellis Island – the Registry Room. A superb vaulted space suffused with natural light, the Registry Room supplies all the interior sense of occasion absent elsewhere. Once in it you are pleased, after all, that the staircase does not intrude centrally.

The floor tiles mirror those of the Guastavino vaults (a Catalonian technique which involves three layers of terracotta tiles set in a bed of Portland cement). Restoration involved cleaning the 28,282 tiles (when individually tested with a rubber mallet, only 17 needed replacing), repairing original window sashes and removing internal partitioning added after 1924.

The Registry Room's mezzanine level originally featured walls finished with Caen stone, an arcane type of plasterwork the duplication of which demanded considerable research. This prompts John Belle to point out that one of the valuable by-products of the Ellis Island project was "to reaffirm the importance of doing basic research into materials and construction methods".

After processing in the Registry Room,

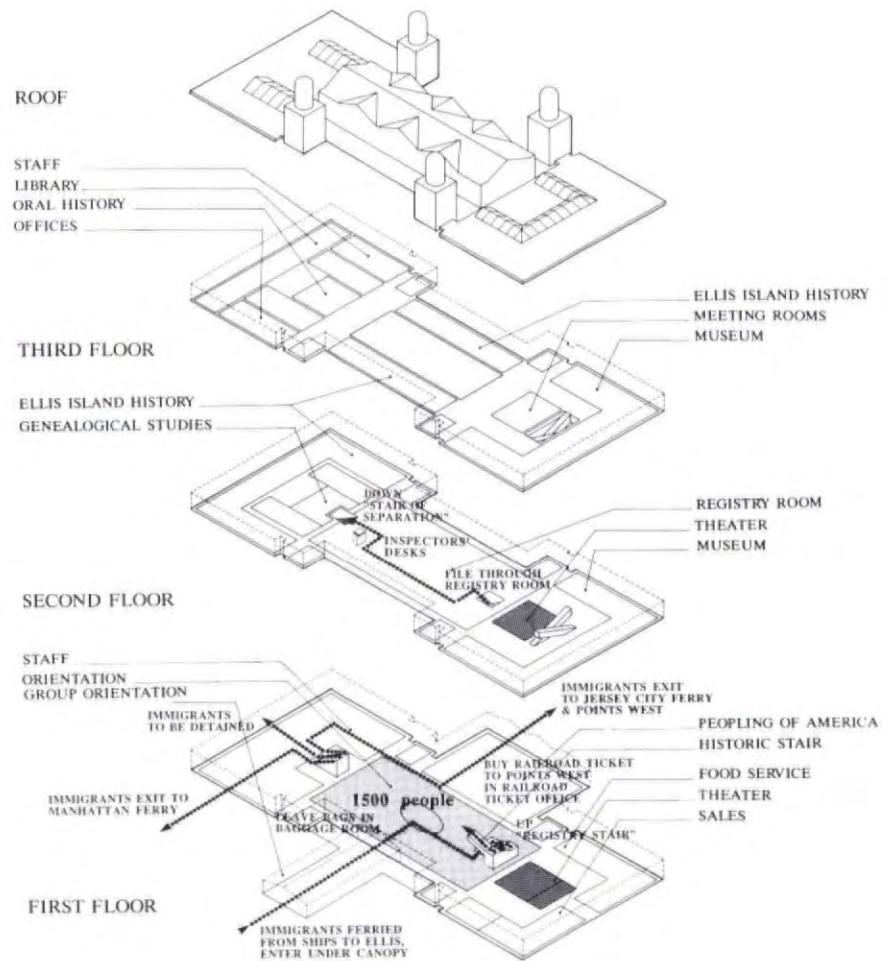
immigrants would face The Stair of Separation, a feature of minor architectural interest but major emotional import: there, rails separated those to be detained from those taking the ferry to Manhattan or buying rail tickets for points west via Jersey City. The Railroad Ticket Office is back on ground floor level, behind the Baggage Room; now reroofed with stainless steel, it still has difficulty looking like anything other than what it always was – a rather gloomy afterthought.

But with the main immigrant route successfully re-established, much ancillary work remained to be done. Space for new exhibit areas and escalators has been reclaimed by enclosing a light well at the edge of the Main Building. Here also the past location of demolished walls is marked on the floor in black marble. A new curatorial complex houses offices and conservation facilities, whilst public amenities added include a restaurant, museum shop, cinemas and meeting rooms.

New mechanical system

The architects also adapted the powerhouse, introducing a completely new mechanical system which delivers power, water, heat and cool air to the entire island. Steam heat was retained both for its humidity properties and because it was felt

Typical path of immigrants through Main Building at Ellis Island.



that the traditional sound of hissing radiators was part of the ambience.

It is interesting to discover that certain details, such as copper cornice crestings, were artfully reproduced using stainless steel framing and epoxy bolts – a harmless and practical deception in a restoration otherwise only too anxious to declare its modern additions.

Indeed it is that overall integrity of approach which has helped to keep Ellis Island mercifully free from phoney "theme-park" presentation techniques (Serbo-Croat peasants recruited from central casting, emigré luggage scattered about . . .), replacing them instead with an architecture that encourages the imagination to work.

Ellis Island was a major piece of US government policy interpreted into a major piece of architecture. In reclaiming it from near oblivion, the two architectural practices have demonstrated exemplary judgement in balancing an intelligent sense of history with the practical demands that attend the realization of any building.

As John Belle says, "In designing for the huge volumes of visitors anticipated, we came to realize that we had the same problem as the original architects, Boring & Tilton: our task was to accommodate and shelter large numbers of people arriving at the island by boat, 12 months a year." □

The International Forum of Young Architects is a worldwide organisation aiming at stimulation of avant-garde trends in architecture.

Editor:
Georgi Stanishev
Design:
Georgi Stanishev
Ivan Ivanov
Text editor:
Evgeni Dainov

Photography
Georg Valerius
Jochen Muller
Paul Werr
Peter Siedel
Ulrich Winternitz

Right:
Eledil, a pub in Darmstadt.
View of the pool area.
Below:
Heavy Metal chairs.

DANGER!

Architecture of Paul Werr and Siegrun Reuter

The young architects Paul Werr and Siegrun Reuter work together in the town of Idstein, a small traditional German settlement near Frankfurt. Their provocative, even aggressive designs challenge the local society and environment.

Their architecture seems to be based on a kind of formal and spatial shock-therapy and is used as an instrument for confronting and deautomatising conventional typology and codification systems. They believe that this architecture teaches people to see forms and spaces with new, independent and nonconformist eyes, helping them to discover new attitudes towards reality.



Siegrun Reuter was born in Lauterbach in 1957, and received her diploma in architecture in FH Wiesbaden in 1977. She also studied at the Academy of Fine Arts in Munich. Paul Werr was born in Frankfurt in 1953, and received his diploma in the same School of Architecture. Since 1981 Siegrun and Paul have worked in a team as freelance architects.



Conversation with Siegrun Reuter and Paul Werr

Georgi Stanishev: When I proposed the title "Danger" for this feature, you were, it seemed to me, not overly surprised. What is it that evokes "danger" in your work, and, more generally, what dangers can there be in architecture?

Siegrun Reuter: There are people who believe that the function of architecture is to fulfil and represent the existing order. They are the ones who see as dangerous an architecture which calls into question this order, which risks involvement with other structures or qualities.

Yes, our culture confronts. People are frequently at a loss how to react, what to do, because our architecture attacks them, in a sense, by attacking their values and references.



We use materials and elements that are familiar, but we use them in an unfamiliar manner. We break customs and habits because we doubt conventions and traditional approaches. We think that an architecture which stiffens to orders and hides behind beautiful manipulation is what is dangerous.

GS: Each artistic act/fact makes an imprint on the memory of culture, carries on a dialogue with different traditions. What traditions in architecture, and outside it, do you involve in your work? Do you believe in tradition as an instrument for the origination of new architectural works or texts?



*A network as Captive of Space.
Installation.*

SR: Naturally we do take things outside of ourselves. Today the influences of tradition are intensely felt. But we want to create an independent architecture, an architecture which as much as possible relies on its own structures. We take a problem, and we try to solve it. When we work, we don't think about roots. We create architecture.

We don't know whether we "believe" in tradition. Each architecture has to be recognised in its own time – is an expression of its time – with its particular coherence. This is an important point. Everyone has to find his own way out, searching the architecture of his own time.

GS: I would not like to get involved with classifications, but your architecture looks to me a part of a wider field of investigation, where today one sees engaged a whole group or constellation of architects. Within such a context, nearest to you would be the Himmelblau and Daniel Libeskind. This more general investigation seems to have already evolved its own professional vocabulary, although this vocabulary rather codifies transgressions, not rules, in this way presenting great opportunities for individual freedom. And yet, this trend also has its past, cultural traditions that it uses, roots.

SR: We are aware of this wider context. Similar circumstances produce similar problems, similar ways of looking at things. Nevertheless, everyone formulates their own architecture. If you mean that there is a trend within which different architects create different architecture, then we can say, yes, fine, we belong to it. Architects create architecture, critics create trends.

Our architecture has many roots. Architects try to live and work towards expressing their own convictions, and do this in their works. Take the expressionists, the constructivists. We like their way of working. We also like Kurt Schwitters, David Smith, Kandinsky, Miró . . .

GS: Is not your position a kind of radical individualism? Or is it a certain original form of critical social utopia?

SR: We are exploring living space, we try to construct a space that transcends the limits of today. The challenge is the

experiment in the experience of space. The premise for that is tolerance. We want to construct a non-constrictive living space. Step by step, learning to accept change. Everyone must make decisions and search alone, independently. The process of change will signpost the way.

We do not want reconciliation. We show the present situation, lay open the morbid character of reality, we intervene and provide impulses for the construction of new space. We show interstices and create open space. We think that a culture which does not care about living space destroys. We attack this, and we intervene. In architecture, we destroy the belief in the unthinking subordination to conventional orders. We want to overcome the limits of the present, so that space can develop itself.

GS: At this point we seem to be very near the problem of morality in the architectural profession, and the connection with the freedom of creation. Are you a religious person? What is your attitude to the Church?

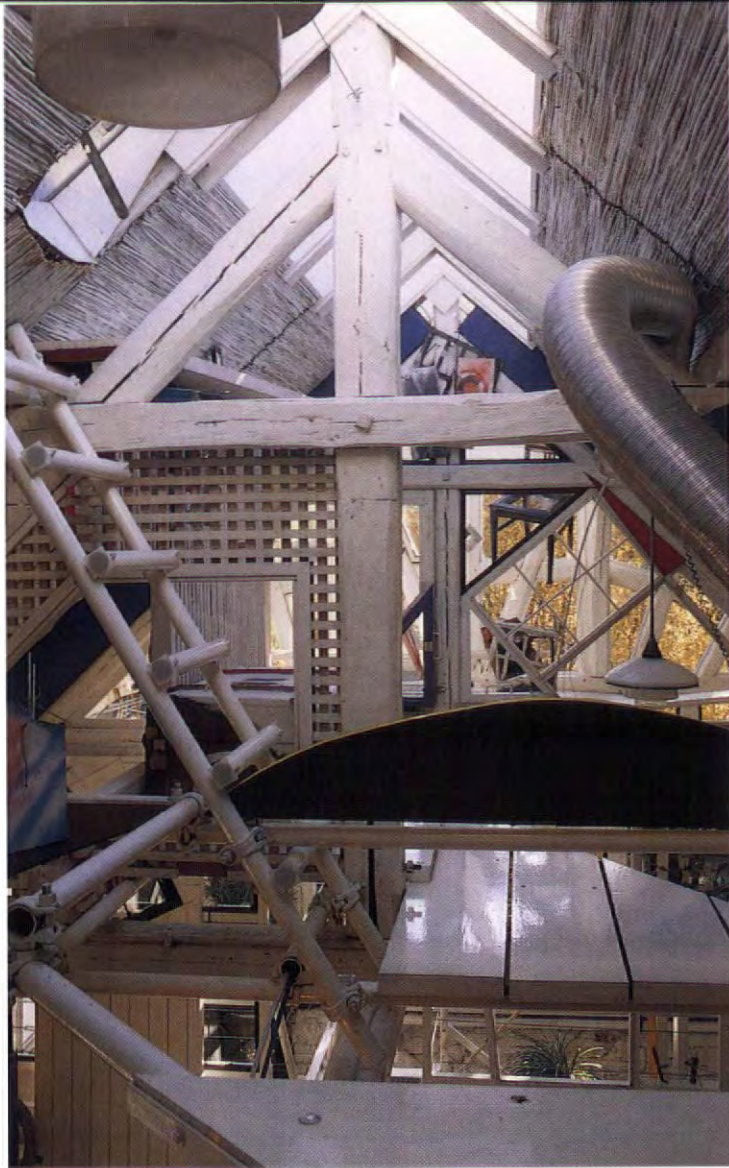
SR: I don't agree with the Church. I think the Church directs people and I want the opposite – for everyone to choose their own way.

GS: By an association that I'm not too clear about, I am now thinking about the brilliant characterisation given to democracy by Alexander Zinoviev. He is a Russian mathematician and philosopher, living in the West since the mid-1970s. And in the West he failed to find his ideal. In one of his interviews he said that in his opinion, freedom and democracy can exist only in countries where the state sees its own subjects as so many other and sovereign states. Does your architectural philosophy have anything to do with this principle?

SR: We create an architecture that is between art and construction. This architecture demands tolerance and favours comprehension. It is an architecture which takes open space and the liberty of doing, an architecture which does not want limitation.

We think that people should oppose any system which tries to force on them its rules or orders.

The best way is to go forward and build one's own structures. In one's profession,



Barn + Terrace between wall and tree, Niederauroff, 1981-1984

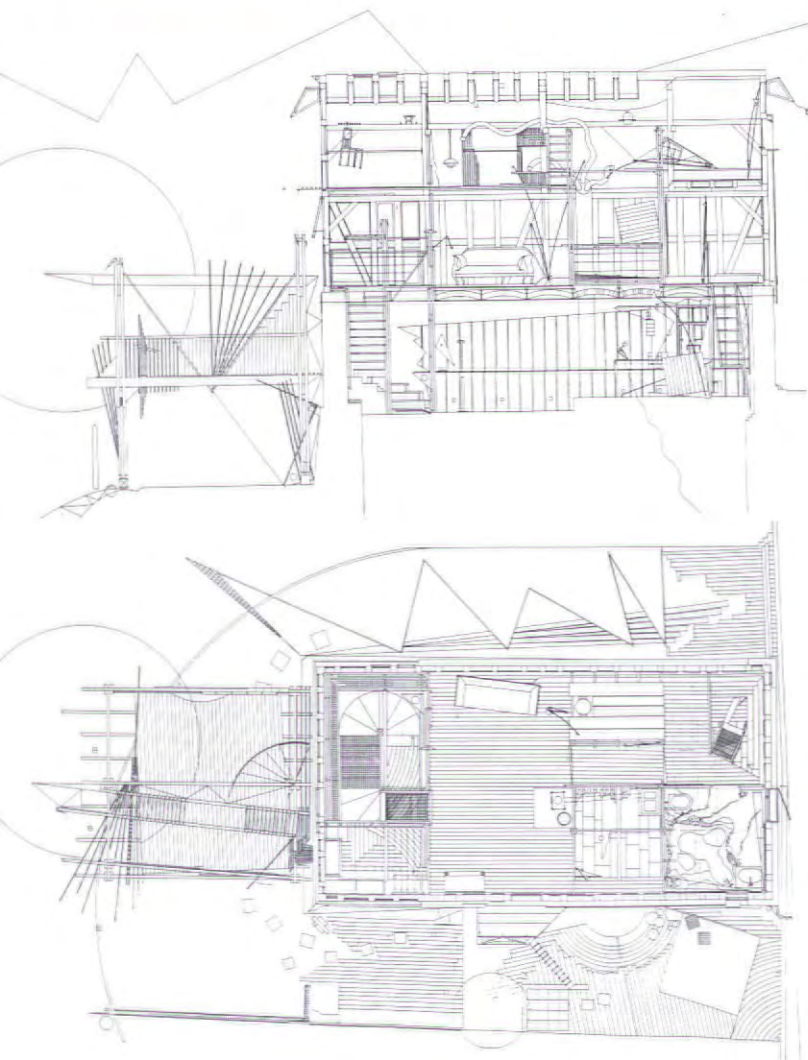
A box is sitting on a large stone base. The box encloses the new structure to the north, east and west. To the south it is open (wintergarden). Inside the barn, the existing framework remains visible. New structures are inserted in layers – an interaction between

the old and the new architecture arises. The concept gives flexibility to the whole space both horizontally and vertically (curtains, walls, ceilings etc). During summer the house opens. In winter it closes. Space develops itself in permanent variation – liable to its own orders.

Inside the barn there is a tension between old

and new. To the south, the new, condensed space meets the existing structure and opens to the terrace between wall and tree – an independent structure – standing in front of the barn.

Looking to the garden, the tree defines the border. Side walls enclose the terrace to create an intimate exterior space.



Paintings
of Paul Werr.



one has to call into question the established way of doing, to put it aside, and to stand by one's own point of view. Then it is possible to act independently.

We want independent choices for independent people who are of age. We believe that to blindly accept rules, to be uncritical, is more dangerous because then one flees from life. Naturally, to do the opposite is much more difficult, but we believe one should try to go forward so that autonomous dynamic structures can come into being with all their contradictions, with all their nuances.

GS: Should this be taken as nostalgia for a revolution, an appeal for radical changes towards absolute self-determination in society as well as in architecture, or towards an architecture of anarchy?

SR: In Moscow, I would say yes – spontaneously. But what is the meaning? If all this means destroying power, the government, then it is questionable. We are architects and work in the way that we want to. People can see this in our projects.

It is important for us to build in our own way so as to show the possibilities of creating space, bursting limits. To show that one can have the strength and courage to find interstices – open space. Then we can have a "position" which demonstrates independence.

GS: If you put it this way, it shows a dramatic degree of self-reflection, self-awareness. Does this not conflict with the allegiance to intuition and sensuality?

SR: When one takes responsibility for oneself, then self-reflection, reflection on the reality of the present is needed in order to find one's own point of view.

GS: Please do tell me more about your experiences in Moscow. Speaking in the

language of Melnikov, who believed that art is when you can say: "this is mine", what of "yours" have you found in Moscow, and what did you find hostile to you in this city?

SR: On the spot in Moscow, working is more intense than work on the same theme in Germany because we are confronted with another situation, and a strange one. It was an important experience for us. It was the first time we took part in such a competition. Many architects from different countries, working out the same theme in the same room created an atmosphere of permanent intensity. Energy was hanging in space.

At first, we were fascinated by the dimensions of the city, by the scale of things: the breadth of squares and streets, large, solid buildings of a kind we'd not seen before. But there is no scale fit for people. One's eyes dart around, up the levels that are much higher, along distances that are much longer than is human. People look like ants. For us, a very privileged group, everything seemed so easy in this city. But this is not the reality of the city of Moscow. We felt a discrepancy between architectural space and living space.

GS: You are, of course, aware that many of the conceptually-minded, avant-garde architects are more likely to be designing building manifestos, instead of buildings for living in. Do you actually want your architecture to be inhabited? Would its inhabitants accept your order of space, your rules of the game?

SR: Yes, we would like people to live in our architecture. But we don't want an order in the sense of rules. We want to create an architecture which makes possible spontaneous experience. We create

action space which exposes the reality on the one hand, and moulds a strange living space that points beyond function.

GS: And your attitude to function in architecture?

SR: Years ago I read a sentence by someone to the effect that architecture is the art of making all necessity superfluous. We interpret this in our own way. There are many functions which people perform in the same way every time, they don't notice what they do – it's automatic. We want to provide an impulse for people to sit up and notice things, places, living space, action space. It would be a problem for anyone to use our buildings without thinking. In a way we attack people, we want to de-automatise them – to make them aware of what they are doing, why they are doing it. So they are invited to realise space – and themselves. For example, when we build a staircase, we say that the way which leads from A to B is far too important to be left to the unconscious mind. This is a "dangerous" architecture for functional people.

GS: The breaking of expectations and conventions presupposes some kind of a "communications scenario" built into your architectural creations. Do you in fact work in this way? And how do people react to such a "communications game"?

SR: Depends on the people – some refuse it. They want no truck with it.

An important thing is that architecture unavoidably stands in a public space and so people cannot pass by our projects without reacting in some way. And they do react, every time. They are confronted by our architecture. They have to take a position on it. For some it is a shock – we have to accept that. For others it is a provocation, a first step.

When people can jump over their limits, see without bias, then they can communicate with our architecture, because it stirs the dream. People can understand the language of our architecture if they want to.

GS: What instruments of the poetic language of architecture do you use in that sense?

SR: Free superimposition, layers piled



An addition to residence, Lauterbach, 1984-1986

The original residence was built 1906, the extension in 1986. Each is an expression of its own time. The original is a static, closed cube, the extension is a dynamic open structure.

The new transforms and reflects the old in the proportions of the staircase and the new space. The extension takes up the horizontal and vertical axes and continues them.

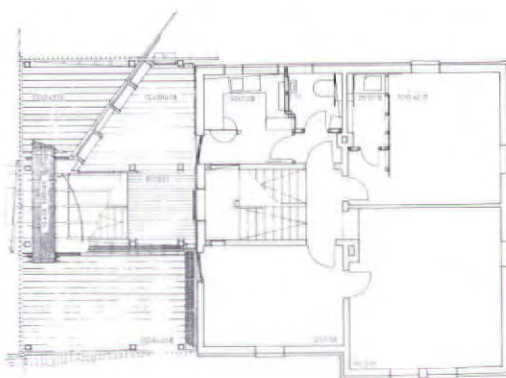
The staircase, a wooden box with a metal roof, is wedged between the big terrace in front of the living room on one side and the small terrace in front of the new wintergarden and kitchen on the other.

The structure of the new building is a superimposition of different constructions, each with its own expression. The staircase, the heart of the building, links inside and outside.

The extension challenges but also

completes the existing residence. It is the open space of the residence. On the one hand functional – terraces, wintergarden, staircase – on the other challenging existing points of view, habits and rules.

This potential for change was already present – it was our task to realise it in architecture.





Paintings
of Paul Werr.



Vision of a town structure. Model.
Top: extension to a house.
Bottom: model of the terrace.

on layers, gradations; condensation of elements and structures in their different relations creates architectonic space. We use objects and materials that everybody knows, but we place them at a different level of expression, put them into new contexts. When elements are put together in new ways, they need not be unintelligible.

We do not create with the aim of getting a specific, calculated reaction. Our elements, our space is ambiguous. We say to people: Attention! judge for yourselves! The observer recognises the fragments, the structures, and has to consider them in a strange context. He has to decide what it all means to him. We just provide the impulse to start a communication, a poetic communication.

GS: Do you not sometimes try to change places, to take the position of the observer, the user, the critic of your own works after their completion? That is to say, to what extent is your architecture non-programmatic?

SR: Our work comes into being step by step. Its overall statement is visible only at the end. Then other analyses and interpretations come in. We let the architecture affect us, we react – act – react – act.

We would say that there is no single programme that leads to a result. Every problem needs its own way to solution. A permanent engagement, a continuing discussion with the object, with the materials and media is necessary for architecture to develop itself.

GS: As I understand it, one of the most important conceptions in your professional approach is the understanding of architecture as a process. Any event of architecture lives on in culture as an intersection of a multitude of processes: temporal, spatial, semantic, physical, ideological. In the recent past, the expression "architecture as a process" was so over-used as to have lost by now most of its essential semantic features. In what is your conception of architecture as a process original?

SR: In our understanding, process is the development of architecture. In putting together space, step by step, we want to

break out of the perception automatism, because this helps you to grasp space, and to realise your position. When one rambles through architecture, space continually changes; it depends on the position of the observer. The eyes move, the body moves. The person reacts and acts. Space is waiting for the journey of discovery to experience it. Every moment new fixed space arises.

GS: Could you conceive other arts as processes?

SR: For Paul, everything is architecture. Me, I like opera, but not Wagner. I prefer Mozart – he is so brilliantly intuitive. His music shows me how to be happy. John Cage – I like him too. He shows me how to be receptive to strange things. The moment is all that is important. Sartre tells me, when I am down, to have the strength to do it again, to try it, to learn to be independent.

GS: Speaking of processes, we have to be aware of what is actually changing. What definition of architecture would you propose in the context of the present-day reality?

SR: We can't say what the future will be, but architecture is one way that leads to the future. Architecture is every time a fixed moment of space we are passing through in the process of change – a search . . . This requires a permanent exposition and calls in to question the moments of reality, so that one can jump over existing limits.

We say *architektur ist fine tatsache*. *Tatsache* means action, fact. There needn't be a final result. It is important to walk along the path.

GS: The problem is, perhaps, that architecture has too many paths today, and everyone wants to look like a real avant-garde . . .

SR: Avant-garde? We don't know of any. Architects today just want to be famous.

GS: The problem today lies, it seems to me, not with people but with culture itself. It is swallowing everything that is trying to be in opposition, to seem radical.

SR: You are right. When culture eats it, it is no longer dangerous.

GS: Do you still think you are dangerous?

SR: I hope so. □

**Eledil – a pub in
Kelkheim, 1986**

The first step was to open up the existing building structure – floor, walls, ceiling – to fix the located substance and arrange it. The second was to organize the new elements, placing them as independent objects and structures in space.

The bar, the main motif, is a connecting link between the different areas of the bistro. The suspended steel structure runs through the whole pub, terminating as a sign outside the building.

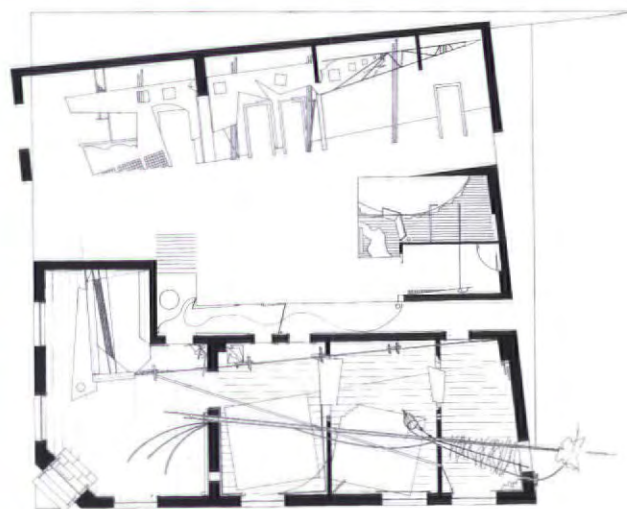
The first space – a bar room. The meeting point. The bar projects into the space, directing the visitors towards the following rooms.

The second space – an “exclusive space”. The aerial structure cuts through and divides the room. A space to linger, to observe and take one’s meal.

The third space. A light, fresh area – the bar motif disintegrates, the steel structure condenses.

The fourth space. The compact steel entanglement hovers in space, piercing the exterior wall.

Space remains free for action.



To Set Signs

Manifesto

Paul Werr and
Siegrun Reuter.

Rejecting reconciliation with the morbid character of reality, we produce an architecture of disturbance and irritation that:

- lays open the point of fracture
- teases the fragments of reality
- doubts preconceived orders and habits
- intervenes
- bursts conventional limits
- generates impulses.

This Architecture is defined by Action, Decision, Fixation: the essence is free action – THE CREATION.

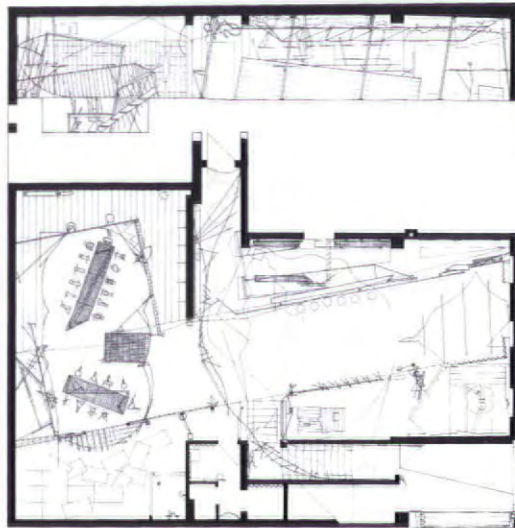
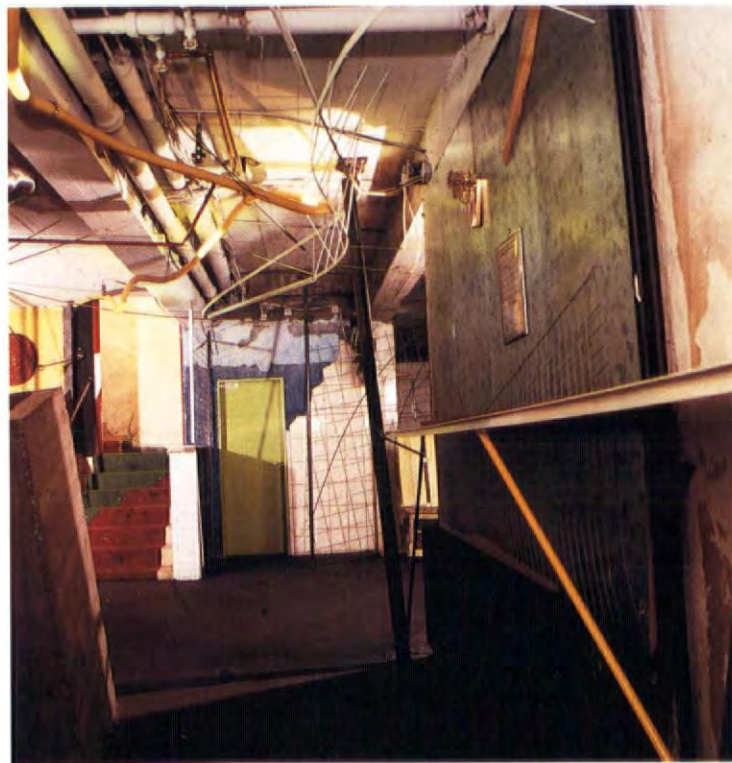
ARCHITECTURE IS ACTION

There is no preconceived programme defining the result. The permanent engagement, continuous discussion, arguments with materials and will are the instruments for the articulation of space – AN OPEN SPACE.

Thus, structures of many layers, of all shades can be discovered and activated. This requires careful exposition of the spatial structure in the process of perception, the process of change.
An action space appears.

In this way architecture becomes more than an end-product. It is an experiment, that relieves the process, which demands tolerance and renders comprehension, which opens the space and allows liberty of action.

Architecture does not want limitations;
Architecture needs A CHALLENGE.



Eledil – a pub in Darmstadt, 1989

The project was carried out in collaboration with Vocker Engelhardt, Mut Muller-Deutsch and Kristoph Keller.

The conception can be summarised in three main points:

- Reaction to the town.
- Reaction against finished and polished building construction.
- Occupation of space with architecture.

Materials: rough/hard – concrete, steel, tar, sheet metal. Method: continuous discussion about the work and the objective, and exertion until exhaustion resulting in the articulation of space and a restless and perplexed architecture.

Architecture is action

The entrance leads down into the subterranean space. Decoration is stripped out, the ceiling is falling down. The exposure of the cellar's structure and the deliberate placing of historical fragments reveals the morbid character of the subterranean space – a reflected image of urban reality. Architecture is the answer.

The dialogue between the existing and the new structures allows the space to be perceived in different ways.

The new layers, whether standing or hanging in front of the original structure, produce tension while also appearing irrelative to one another.

The sloping concrete bar is sinking into the ground. Independent steel structures are fixed to the bar and enclose the space above it. Two parallel axes on the tar floor define a corridor and the interstices between the old and the new architecture.

The structures guide into the pool room. One axis terminates in a lattice wall. A cage is formed – a stage – a green corner. Steel – a table in the pool, chairs as objects, staircase, railing, figure – creates space.

A poetry of architectural challenge is created.

INSIDE A MODERN IMAGINATION

Sutherland Lyall on the spectacular interior created by Herron Associates for British design group Imagination.

LONDON: The only clue to the existence of Ron Herron's extraordinary atrium is the delicate glass and aluminium canopy which noses out from the main entrance of a curving six-storey Edwardian brick façade on London's Store Street.

There is another parallel five-storey block hidden behind it. Herron has wrapped the seven-metre-wide gap between the two with a fabric roof and filled in the ends with perforated metal steel cladding. Herron's original design had fabric right round the gap but local fire bureaucrats pounced on a technicality.

Herron linked the two blocks, now refurbished as white painted office and studio spaces, with criss-crossing perforated metal walkways. The old window openings in the white-painted walls are simply filled in with glass and with off-the-peg white-painted fat vertical ducts exhausting air from the offices on either side up through the fabric roof.

The fabric is held up by a series of suspension rods, push-ups and umbrellas 20 metres above the atrium floor. Half the 30 metre length of the atrium is at ground level, half forming a mezzanine over the long company boardroom. Off the ground floor to the rear is the restaurant and to the front the reception area – designed in-house by Lorenzo Apicella. Glazed doors and the screen enclosing the sixth floor gallery on top of the rear block are in standard section white powder coated steel.

So why has everybody in Britain got very excited and lavished awards on it? For old modernists the answer is obvious: truth to materials and function. There is nothing in the all-white and natural-coloured space which does not have a clear function. The bridges slope and slant only because openings on either side of the space don't necessarily line up. Fabric was a third of the price of a conventional glass and steel truss roof. The ducts are there because that was the most convenient place to put them, and so on. And there is the brilliantly simple detailing, mostly by job architect and old Herron mate, John Randle.

It addresses the structural and jointing problems in the simplest fashion both from a visual and fabrication point of view. For example, all the bridge and stair trusses are welded on the same jig and it was cheaper to



have the fittings at the bottom of the roof push-ups custom cast in steel and given minimum machining.

Equally important is what happens when you are in the building. The perforations of the end walls create a slightly disorientating effect – similar to a moiré pattern – especially when, as you have to from most views, look at them through the horizontal lines of the walkways and their cabled handrails. There is a serendipitous aural effect as well: the aluminium treads creak slightly whenever anybody walks from one side to the other. You get the feeling that this great serene space with its light diffusing down from the top is somehow alive.

Unbelievably, this is the first serious building Herron has built since the London's South Bank theatre and gallery complex of 1960. One of the founders of the Archigram Group around that time, his design and his arguments about "tuning", indeterminacy, pleasure-giving, wrapping, impermanence and the use of available or nearly-available material have influenced generations of young architects, the whole high-tech bit and much of New Modernism. The Imagination building – designed for the adventurous, maverick event designer, Gary Withers – embodies a great deal of that thinking. For once, *pace* Robert Venturi, the reality more than matches the theory. □

Sutherland Lyall's Imagination is to be published by London's ADT Press in 1991.



The extraordinary atrium designed by Ron Herron in the Imagination building: there is nothing without a clear function.



The Watari-um Museum in Tokyo, designed by Swiss architect Mario Botta: winning accolades all over Japan.

EUROPEAN STYLE RISES IN THE EAST

Gaynor Williams on developing trends in Japanese interior design as the market for new ideas sharpens up.

TOKYO: Twenty or 30 years ago the interior design industry in Japan simply did not exist. The big-gun names in contracting dominated the market. What they said, went. And what they said was that clients weren't prepared to pay separately for design – to pay for so-called "softwares" as well as "hardwares".

Names like Takenaka and Misawa still, of course, dominate the market. Anyone wanting to cash in on the ever-expanding Japanese market for interior design could do worse than get on the side of the big boys of design – and – build.

But the market itself is changing. Taste, once

shaped solely by the economic and political stranglehold of the Americans, has shifted away. The Japanese, tired of America, are looking to Europe.

According to Hiroshi Sogabe of top interiors firm Sangetsu: "The US is starting to interfere too much with our economy, and we are beginning to be frustrated. We are bored with American style. So we turn to Europe".

The mere fact that there can be a firm such as Sangetsu is a turn-up for the books. Interior design, however, is becoming big business. Along with a Japan that is cash-rich and also wants to get rid of its embarrassing trade surplus comes the ever-eager Japanese consumer who wants a better office life, more free time, and more leisure.

The leisure industry is expanding readily as a result. Current leisure development budgets in Japan exceed £6.1 bn (US \$12 bn), and potential market turnover is estimated at up to £102.5 bn (US \$200 bn) per annum.

Europeans have not been slow to take up the new opportunities. In the leisure field, for example, interior designers are setting up joint venture deals with Japanese developers and bringing their own expertise from a more developed market at home. Architect Sachio Shida, for example, was the general architect on the Hotel Sun-Inn in Osaka, but in order to recapture the neo-Georgian delights of a British library, he brought in UK firm David Hicks and their Japanese agent Harold Horseborough.

Meanwhile, in Europe at least a few

companies are beginning to see the opportunity that the new market for office design in Japan brings. For instance, Wieage, the design subsidiary of the German firm Wilkhahn, has brought out a new modular office desking system that is specially designed (in a collaborative effort with Japanese company Shukoh) for the Japanese market. Highly systematised, it is smaller in size than most European-designed office furniture, to suit the Japanese physique.

European architects and designers have also got in on the act in Japan, not least because, in the words of one analyst, the Japanese culture is so work-oriented that they need outside help to design and manage their leisure experiences. Also Rossi, Philippe Starck, Richard Rogers, Nigel Coates, Zaha Hadid and David Chipperfield have all become contributors to Japan's collective architectural innovation.

Among the most prominent projects to be completed is the Watari-um Museum in Tokyo by Swiss architect Mario Botta. This has an emphatic structural stance and light, airy interiors which have been winning Botta accolades all over Japan. But he received what must surely be the ultimate designer's compliment when he was asked, not to choose the first exhibition at the gallery, but to be the subject of it himself.

Botta must be one of the few architects to have created a poem to himself in the form of his architecture, and then be allowed to recite it. But that can happen in Tokyo. □



Material edifice serving the spiritual: St Miniato al Monte, a well-preserved church just outside Florence in the Tuscan Romanesque style of the eleventh century. One of the colour plates in *The House of God*.

MATERIAL FORM AS QUESTION OF FAITH

The House of God: Church Architecture, Style and History

by Edward Norman

London, Thames and Hudson, 1990, £28.

Review by Helen Rees

In his introduction to *The House of God*, Edward Norman quotes Cardinal Newman's remark, "Material edifices are no part of religion, but you cannot have religious services without them." Whilst this is not strictly speaking true, as this book reveals, man's quest to represent the transcendent through material form is nearly as old as Christianity itself. It survives even in less formal, ecumenical patterns of worship around the world today, and the achievement of this book is to draw such a panoramic sweep of Church history, combining great detail with economy.

Of course, the mysteries of religion still remain after every symbolic element of a building has been decoded, but this book provides enough evidence of the relationship between great faith and great art for any sceptic.

Dr Norman leads the reader through some of the most extraordinary buildings ever created from the earliest cruciform churches hewn from the rock beneath the Ethiopian ground, through

the great periods of church history from Byzantium, through Romanesque and Gothic Christendom, the Renaissance and the Baroque, the Enlightenment and the Gothic Revival.

But despite the compulsion of the triumphant set pieces of the European tradition, his span also includes shrines and churches – large and small – across the world. The book characterises the Church in the twentieth century as a quest for a new community: although the ancient need to express the abstractions of theology in material form no longer exists, still the desire remains to create and preserve a sacred place. The paradox is that in many secular societies, pilgrims have become tourists, and cathedrals are run like museums. The current proposal to restore the fabric of Britain's great churches before the millennium is a cultural, not an ecclesiastical move. It comes from the chairman of the Arts Council, not the Church Commissioners.

In a sense, any survey of church building from the point of view of *style* reinforces the secular division between the material and the spiritual. Buildings only provide a partial view of history, the hints in this book of the turbulent, dramatic and uplifting events outside the calm interior of chancel and nave are tantalising. But however conscious you are that underlying all these buildings is a faith which transcends form, I defy anybody to fail to be captured by the written and visual clarity of this ambitious and beautiful book. □

MORE POT-BOILER THAN WRIGHT STUFF

Nine Commentaries on Frank Lloyd Wright

by Edgar Kaufmann Junior

Cambridge Mass, MIT Press, 1990, £26.95.

Review by Alan Blanc

The Frank Lloyd Wright book-making industry gathers pace. The latest offering is published posthumously from the pen of the most loyal devotee, the son and heir of the client who built Falling Water.

By contrast Brendan Gill's writing is far more acidic in *Many masks* and portrays Wright as a congenital liar as well as totally unscrupulous in matters of money or in purloining other people's ideas. Kaufmann Junior was luckier in his experience. Firstly, he was cushioned by his father's wealth, and secondly, he was only involved in upkeeping a few masterpieces as opposed to taking on the rough passage of a Wrightian patron the second time around. He will always be remembered as the Taliesin apprentice who introduced FLW to his most prestigious domestic client.

It is worth recalling that young Kaufmann employed Neutra for his major foray into patronage, namely the memorable Desert House, Palm Springs in 1946. The *Commentaries* is largely a pot-boiler with little to commend it other than the chapter dedicated to "Plasticity Continuity & Ornament", perhaps nearest in spirit to the time when the Kaufmanns and Wright were closely connected.

The other interesting reference is the fullsome testimony by the engineer Paul FP Mueller concerning the foundation settlement of the Auditorium Building, the Adler and Sullivan masterpiece which involved the joint talents of Mueller and Wright back in the late 1880s. That combination of egos worked together again on the Imperial Hotel, Tokyo. The complex, although not damaged in the famous earthquake, did settle several feet below pavement level. The thrust and truth in the collection of essays is difficult to fathom. In the case of the Imperial Hotel, the foundation detailing was in fact the contribution of Rudolph Schindler and not Mueller.

The differences in language is another stumbling block for those unravelling Wright. The first son, Lloyd, is quoted as visiting the gardens of Versailles and several chalets. He is led later by FLW to study the "treasures of the Louvre and the Folies-Bergère".

The illustrations of the "Kindergarten Gifts"

of 1876 are revealing as a source of pattern-making for a youngster brought up in the backwoods of Wisconsin in that decade. Fröbel's Third and Fourth Building Boxes are, however, the more illuminating with the prospect of construction from a total of three cubic feet of lumber. The dimensional system reminds this reviewer of the blocks written about by HG Wells and devised for his children 20 years later.

Kaufmann Junior disparages writers like MacCormac with their explanations for tartan grids in Wrightian plans. Such preoccupations are commonplace amongst today's designers.

This is a lean book of essays culled largely from previous contributions to the *Journal of the Society of Architectural Historians*. It would be much more fun to read the actual correspondence that passed between FLW and Edgar Kaufmann Snr. □

"Just What Is It That Makes Today's Homes So Different, So Appealing?" Artwork, 1956, by Richard Hamilton, one of the key figures in The Independent Group.



ENTHUSIASMS OF POSTWAR YEARS

The Independent Group: Postwar Britain and the Aesthetics of Plenty

London, MIT Press, 1990, £31.50.

Review by Mary Banham.

The British Independent Group was active in the early 1950s within the fledgling Institute of Contemporary Arts. It drew together a collection of young professionals operating in a wide variety of activities. The days were exciting. Postwar enthusiasm crackled in the air. At last young people of like mind and interests could come together for the first time since the huge hiatus of the second world war. In the case of those who were at school until 1939, the war helped form their ideas, interests and politics, if only as a reaction to the misery of wartime existence.

The ICA was then run by pioneering theorists like Herbert Read and Roland Penrose who were seen by the "Young Group" (as the IG was originally known), somewhat unjustly, as

yesterday's men with fixed ideas whose time had been and gone. Rather than spit out these young rebels, some of the ICA Board tried the daring experiment of containing them, housing them and giving them a voice.

For a few vigorous years the Independent Group mounted lecture series and exhibitions, wrote and spoke – bringing artists, architects, academics, musicians, scientists, mathematicians together under one roof. The ongoing arguments reverberated within the ICA's useful neutral space (the clubroom and bar) and in the coffee shops of Piccadilly late into the night. Homes were opened by members all over London where the talking continued. Then it was over.

The finishing point was at the Whitechapel Art Gallery in 1956 with the exhibition *This Is Tomorrow* where "clumps" of artists, architects and designers, (at least one of each in every "clump" (Peter Smithson's description), were allocated spaces to fill as they pleased. Communication was the important word throughout the show and the life of the group. The future was paramount. The ICA membership in general and other interested persons in the London of the time were never

allowed to remain ignorant of these events. After *This Is Tomorrow* came dispersal – into careers, the countryside, overseas. Perhaps what needed saying had been said?

Now, after all this time, the Hood Museum at Dartmouth College, New Hampshire, USA, has decided that those few years were important enough to look at again. Would the now well-known names in the Independent Group – Richard Hamilton, Eduardo Paolozzi, Reyner Banham, Lawrence Alloway, John McHale, Alison and Peter Smithson, Colin St John Wilson, Theo Crosby, Nigel Henderson – have pursued their lives and careers in quite the same way without it?

All this is explored in this stunning book which is much more than an exhibition catalogue. Inevitably memories produce the *Rashomon* effect. Some central characters have not survived to write their assessments. Some views from today put interpretations on the events that none of the participants would recognise. None the less, the book is a useful record and may be a revelation to many witnesses. The Independent Group *was* an important seedbed of ideas. Many flowered. It is worth looking at again. □

POLITICAL VISION OF SOCIAL ENGINEER

The Architecture of Ralph Erskine

by Peter Collymore

London, Architect, 1990, paperback edition, £13.50.

Ralph Erskine Architect

by Mats Egelius

Stockholm, Byggforlaget in conjunction with the Swedish Museum of Architecture, 1990, £45.

Review by Lucien Kroll

Peter Collymore's work is a fine-looking book, but I am not altogether sure whether it is a thesis or a monograph. The text is clear and concise and it gives a good idea of the architectural personality. The photographs are good, the plans legible and specially drawn for the book. However, Erskine was much more than this: there should have been (as an appendix?) some of his writing and something of his recorded lectures, which the author describes as passionately interesting.

We could have done, too, with far more pictures, so as to get to closer grips with the built reality and working-plans drawn for the buildings and not these perfect drawings, expurgated and cold.

More than anything else, it is the hagiographic tone which is frustrating. A fairy story is being told: "Once there was a little boy, Ralph, whose mother and father had brought him up amongst Quakers and Socialists. He became an architect, then went to work in Sweden, working on a boat . . .". It doesn't ring true: Ralph Erskine lived through difficult and trying situations, a foot in two countries, which he looked upon and judged with a precise eye (or simply said nothing). He allowed himself to be ripped off by intellectually dishonest clients (or didn't know).

Was the Byker Wall conceived in cheerfulness and municipal harmony? Without discussion, without opposition? What were his relationships with colleagues, with theories and with architectural movements? He upset people enough with his stubbornness.

One gets a good sense of Ralph Erskine's way of organising his architecture around his political vision, using elements which were evident when his vocabulary was first formed. If he used elements of modern architecture, it was never to make a technological landscape like the brutalists, nor was his landscape administrative, stocking goods like Gropius, Taut and Meyer, or expressionist like Le

Corbusier, or poetically well-engineered like Chareau's.

He used these contemporary techniques simply to construct the social landscape he could see, with its neighbourhood relations and its place in the environment. Naively. Never to produce a merely utilitarian object.

Erskine is no industrialist. I have seen him fascinated by the living-space of the Midi, which opens up and closes according to the sun and the seasons. Common and spontaneous like the bindweed, the shutters are the medium of this relationship to the climate: they palpitate. He wanted to analyse this, and apply it to the Arctic, as well as the structure of the streets protected from too fierce a sun (or too icy a cold) and the continuity of social differentiation in only slightly specialised neighbourhoods (whereby he succeeded in mixing whites and Eskimos together). Architecture is a means and not an end.

Quite naturally, his experiences with the Quakers and with the Fabian Society had taken him amongst "ordinary people", and had convinced him that they all had "a part of God" and of socialism, and that in order to conceive the richness of their activities and relations, it was simpler to ask them to share in developing the idea for what was to be built.

At that time, architects still "knew", they invented it all themselves and they didn't have to ask anyone else what needed to be done. Some dared occasionally to take a look at the inhabitants, but only through the key-hole. Or they might send in mercenary researchers, who would translate them all into cool papers, into quantified reports, into methods – but never into a personal exchange.

Erskine himself carried on with his meetings, listening, proposing, modifying, more and more naturally, astonishing other professionals. They suspected him of manipulation when he was simply (but so skilfully) trying to respond to desires and purposes which had remained

unheard by generations of engineers.

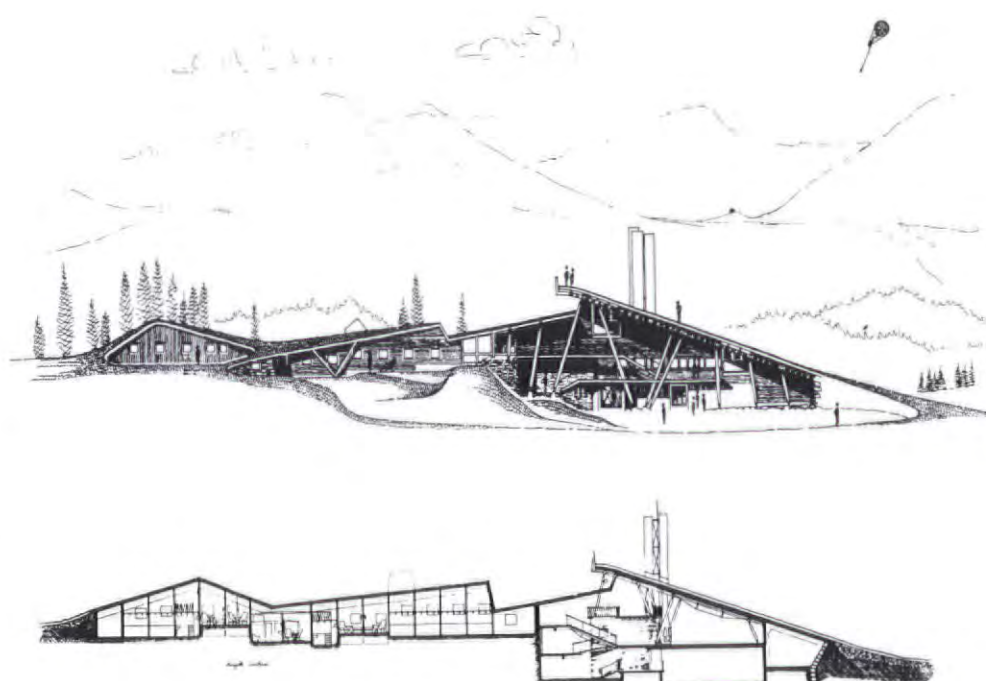
His Arctic masterpieces, and particularly his Byker Wall (always seen from the road), are well known. But little is known of the planning details negotiated with the local people, and his stubbornness in insisting on rounded and multi-functional neighbourhoods (and not merely residential neighbourhoods as all the developers wanted because it suited them). Less still is known about his political motives or the image of society which can be seen in all his projects.

It is encouraging to see political concerns such as Erskine's bringing about an architecture so accomplished, later to be appreciated all over the world and published not as images to be consumed but as witness to a process and an activity whose richness and density of social life can clearly be seen.

In addition to Collymore's work, a well-produced English translation of a Swedish publication on Erskine, written by UK-trained Swedish architect Mats Egelius, has now appeared. A short section of this book was published in advance in *World Architecture* 6. The full work provides a comprehensive review of Erskine's life and projects. Furthermore it has been supplemented by new material for the English language edition.

It examines in some detail the vernacular roots of many of Erskine's ideas, his interest and practical experiments in climatic design, and – through his sensitivity towards people – how he gives form and meaning to a variety of housing projects in different localities, yet retains his own imprimatur.

To do it with a careful regard for the financial aspects of such a system is, as Egelius notes, a remarkable achievement. But then Ralph-Erskine is a remarkable architect and this book goes a long way to record that fact through well-written text, numerous colour plates, plans and sketches. □





World Architecture is the official magazine of the International Academy of Architecture. Here, the aims, organisation and activities of the Academy are outlined.

Scope of objectives

The International Academy of Architecture was set up in 1987 to stimulate development of architectural theory, criticism and creativity, and to initiate advanced studies of post-graduate qualification training of talented young architects. It is a non-governmental organisation, recognised as an international consultative body with the United Nations Economic and Social Council. Its members have been selected from internationally recognised professionals in architecture: 44 of them are honoured with the academic rank of IAA Academicians and 38 have the title of IAA Professors.

The Academy engages in a wide range of research, design and training activities. It organises conferences, seminars and exhibitions, and takes part in joint projects with international firms and organisations of various countries. Its strategy is defined by its basic programmes related to the problems of architectural town planning and building design, architectural theory and its application, and the development of architectural education and professional information.

Activities in 1990

The Academy has explored four main research topics over the past year: architectural education; architecture and ecology; architecture and children; and social housing.

More about the IAA

If you would like to learn more about the activities of the Academy, please contact: Edith Kraichkova, International Academy of Architecture, 2 Rouski Boulevard, 1000 Sofia, Bulgaria. Tel: +2-873863. Fax: +2-871313. □



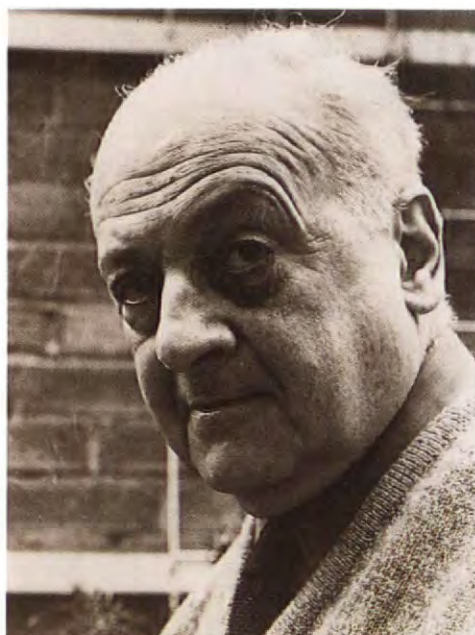
Concept designs from a "Greek Village" young architect seminar held in Sochi, USSR in July 1990, organised by the IAA. The aim of the ten-day seminar was to develop designs for a resort complex maintaining the folklore traditions of Greek architecture.



Various graphic design cuts from the Vienna Werkstätte are featured in the new paperback edition of Werner J Schweiger's well-received study *Wiener Werkstätte: Design in Vienna 1903-1932* (London, Thames and Hudson 1990, price £9.95).

PAST MODERN

Dennis Sharp reflects on the life of the cosmopolitan modernist Berthold "Tolek" Lubetkin (1901–1990).



With the death of Berthold Lubetkin last October, the last important link in the chain of British modern architecture snapped. He was the bedrock figure of British modernism.

Born in the Caucasian capital of Tiflis, he left the USSR for Paris in 1925 where he acted as site architect for Konstantin Melnikov's dynamic Soviet Pavilion for the Paris Exposition of that year. He made many friends among the artistic avant-garde and for a short time he studied with Perret at the École des Beaux Arts.

After unsuccessfully trying to return to his native Soviet Union, he came to London in 1931. In 1932 he set up a co-operative of young architects, TECTON, which consisted of a group of recent graduates from the Architectural Association, London, who were committed to the tenets of a new radical architecture.

His earlier training had been in schools of architecture – in Warsaw, Moscow, Berlin and so on – that had distinct constructivist tendencies, and his later English work indicates that he had fully absorbed constructivist elements into his own rational and classically organised compositions. Nowhere is this clearer than in his most celebrated "functional" project devised, of all things, for penguins and situated in the heart of Regent's Park Zoo. It was one of a number of buildings that Lubetkin was to carry out with TECTON for the London Zoological Society at their London HQ and country park at Whipsnade, Bedfordshire.

The Penguin Pool is now a Listed Building and was completely refurbished by Lubetkin himself, with John Allen of Avanti Architects. It is his most popular and lyrical work. Its zoological specimens perform their daily rituals on a curved concrete stage set lifted straight out

of Meyerhold's theatre designs of the 1920s. These zoo buildings were the curtain raisers to most of Lubetkin's later projects. Their curvaceous and controlled conceptual imagery had a profound influence on other modernist practitioners.

Lubetkin had wholeheartedly joined in with the formation in 1933 of the somewhat euphemistically termed Modern Architecture Research Group (MARS). But he soon found it was more interested in receiving commissions than in carrying out serious research in areas of architectural and social concerns. He became impatient with the Group's remoteness and with its inability to tackle the numerous social problems that beset a troubled but optimistic era.

In 1935 together with Francis Skinner he formed a counter group to MARS, The Architects' and Technicians' Organisation (ATO) which soon built up a multi-disciplinary membership from many parts of the building industry. It took on as an area of primary research the problems associated with inner-city housing and gave a tone to its simple researches which today we would call "social engineering".

Lubetkin's own architecture became more and more concerned with problems of "human betterment" – to use one of his favourite phrases. He was concerned with the enhancement of the human condition, advancing with it and making people feel comfortable in their built surroundings. Picking up on the work of Dr Scott-Williamson and Sir Owen Williams in Peckham, with TECTON he promoted and designed the remarkable Finsbury Health Centre in 1938.

In 1939 TECTON's own research work

became much more specific with the preparation of an important exhibition and document called *Planned ARP* based on the firm's investigation of structural protection against possible air attack in the Metropolitan Borough of Finsbury.

After the war and the eventual break-up of TECTON, Lubetkin, Bailey and Skinner completed a number of housing blocks in Finsbury at Priory and Spa Greens. Lubetkin went into planning.

During his appointment as architect and planner for Peterlee New Town in north-east England he prepared designs for a concentrated central city along Soviet lines. It was to be a twentieth-century workers' paradise. However, the economic rug had already been pulled from under his Utopian dream with the deliberate but unpublished government run down of the mining industry as well as the bureaucratic desire for suburbs rather than centralised cities. With a mixture of anger and despair at not being told the real facts Lubetkin gave up. He began a new farming career in the Cotswolds.

Later, through Edward "Bobby" Carter, the former AA Director, and other like-minded friends, Lubetkin was thrown back on centre stage. The grand old man of architecture, reclusive and long retired, was sharper and wiser than ever. He was ready, willing and consummately capable of setting the profession to rights. With a lucid, topical and pertinent speech he accepted a belated Royal Gold medal from the RIBA in 1982. In his speech he launched a bitter attack on what he called "transvestite post-modernism", defining this stylistic aberration as the "mumbo jumbo of a hit-and-miss society". How right he was.

Lubetkin was not prepared to wrap up the corpse of modernism in any kind of historicizing and eclectic shroud, although – and there is a certain irony here – he had himself introduced two nubile classical caryatids in order to support the free flowing entrance curves of his controversial Highpoint II flats at Highgate, London in the late 1930s. Was this now seen as a mere slip of the draughting pencil or an attempt to enrich and humanise the cool, continental beauty of his earlier scheme? As with so many other matters, he never said.

His re-emergence in the 1980s as a major architectural figure was much more than a rehabilitation exercise by a Gold Medal jury. Lubetkin had been quietly getting his house of architectural convictions in order over the many years he had been nursing his sick wife. The last few years he had on his own he spent as a popular platform speaker and a student sage, taking only a few advisory commissions but always convincing people of the efficacy of architecture as a socially committed art. □

Who is tomorrow's architect?

Pierre Vago looks at the sporadic initiatives in architectural education around the world and concludes that the issue really needs a more serious and concerted global approach.

Initially this column was intended as comment on the news of the day. But how can one keep up to the minute when there is an inevitable time lag in editorial production and publication? Luckily, there are some subjects which are always topical. Architectural education, for example. It was already the subject of urgent argument when, having finished my studies under my dear teacher Auguste Perret, I organised an international meeting devoted to the theme at the Milan Triennale. Even 60 years later, some of the papers given and some of the discussions are still interesting to read.

One year after the foundation in 1948 of the International Union of Architects (UIA), a permanent committee was established on architectural education. This was one of the most interesting in the Union, together with the very active working group on professional practice. Alas, both were abolished when I left the General Secretariat, and they were never seriously reactivated in 30 years. The importance of the subject and the interest it holds for architects were proved by the success of the Paris Conference in 1965, which was entirely devoted to this theme.

The subject is especially interesting now, when the conditions within which we exercise our profession and the profound changes which have occurred (and are still occurring) in every field – philosophical, political, social, technological and economic – pose two difficult questions. What is the “profile” of the architect of tomorrow whom we must train today, and how is this architect to be trained?

These are two complementary questions, which it would be wrong to confuse or to amalgamate, because they are of different natures. Also, in general, these two questions don't interest people to the same degree. There are excellent architectural “practitioners”, who are not particularly gifted in a pedagogical way. Conversely, theorists, historians, critics and teachers may be altogether allergic to many of the more practical aspects of the profession, and their creative abilities no more than mediocre.

Two problems, then, complementary but distinct; two fields to be explored in depth, in parallel (sometimes in conjunction) and preferably at an international level, as the basic issue is the same in all parts of the world. If the UIA has a mission to accomplish and a duty to carry out, this is certainly it.

This is a redoubtable task and a great responsibility requiring long-term work and great support of every kind and at every level, national, regional and international.

However, while we are waiting for the Sleeping Beauty to awake, there are here and there a number of more or less sporadic

initiatives in this field. Some are interesting, some less so. In general, they are of interest to postgraduates rather than to students in schools of architecture.

I'd like to mention first those organised by young architects themselves, who have established “Forums” in many countries. Their main activity is to arrange meetings in the form of workshops. Here, international teams work, usually for a fortnight, on some actual project. I was recently invited to take part in one of these Forums, organised by the French group at Perpignan, an historic and beautiful city in the far south-west of France.

More than 70 young architects (from 25 to 40 years of age) came from about 30 countries – Japan, Hong Kong, Vietnam, Russia, Chile, Argentina, Brazil, Paraguay, Peru, Mexico and Canada as well as from Africa and Europe. In happy and fraternal mood, they gave their enthusiastic attention to the difficult problems faced by this city in full-scale expansion. Considering the scope of the problems and the short time at their disposal, the results were remarkable.

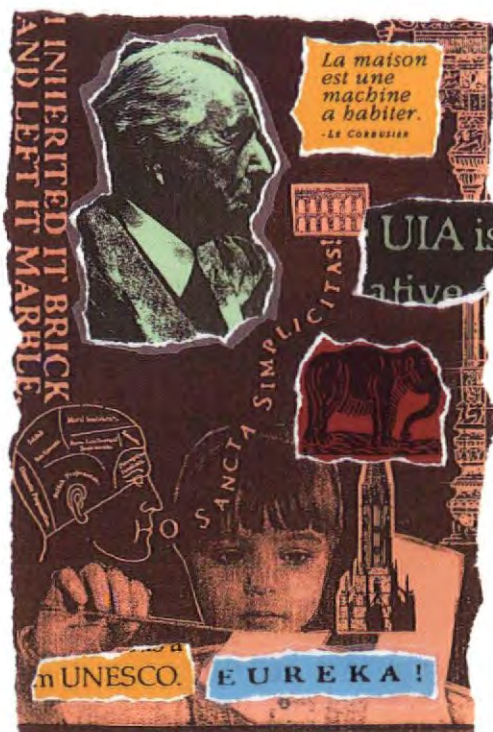
Workshops supplement aims

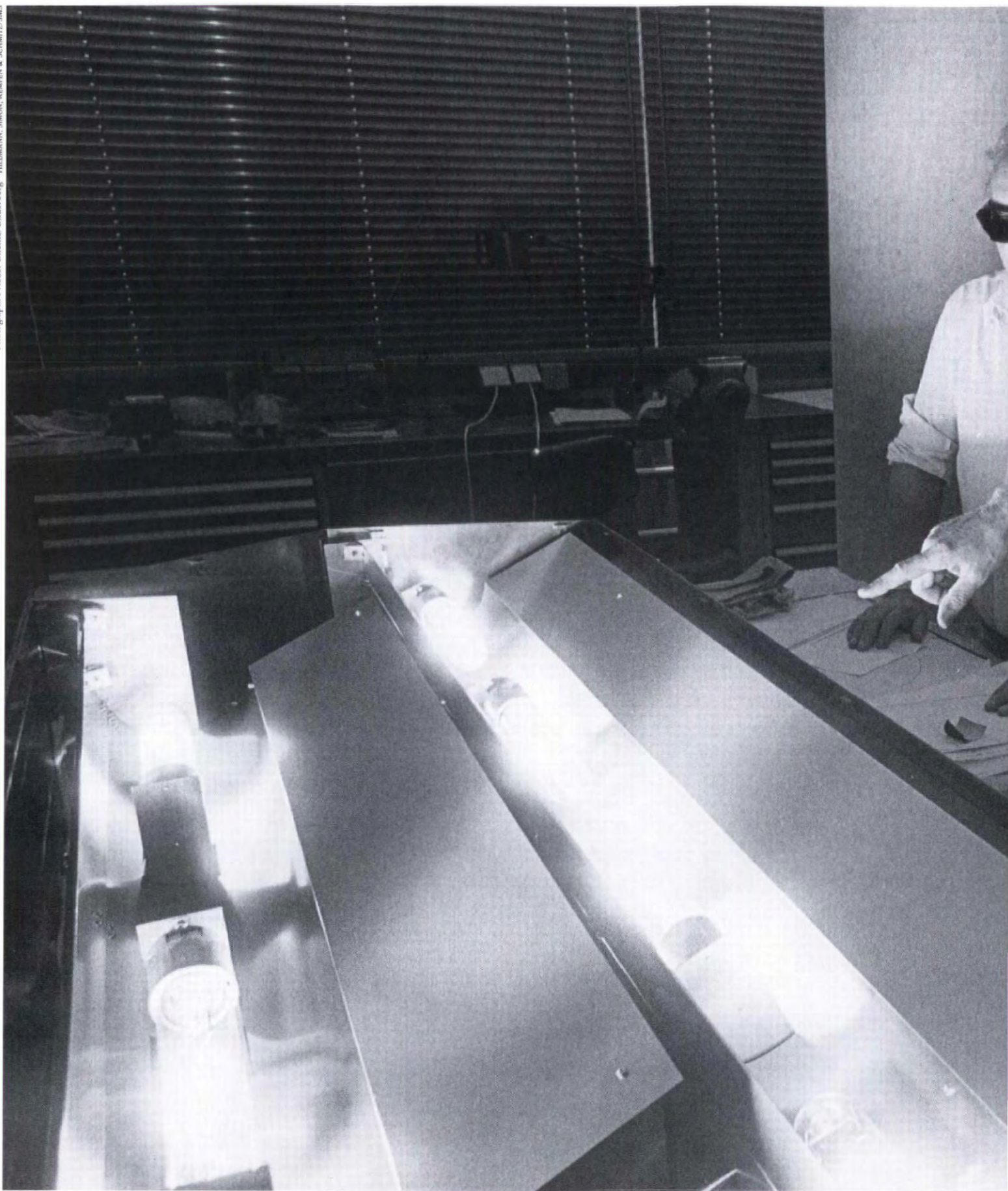
Other workshops, lasting three weeks and following a somewhat different “pedagogic technique”, are organised by the International Academy of Architecture, either at the wonderful monastery of Santo Kiriko in the Rhodope mountains of Bulgaria, or at the sites being considered during the workshops: Bokhara in Uzbekistan, or Makhachkala on the Caspian Sea. Led by architects such as Aubock, Candela, England and others, these workshops operate on the basis of international teams of five to seven young people. Each team is set the same task, which allows an interesting confrontation and comparison of ideas.

It would be unfair to suggest that the UIA is totally absent from this field. At the initiative of the French, during the triennial Congresses, work done at a great number of architectural schools and selected by the teachers concerned, is judged by an international jury, which awards prizes, grants and so on. This activity receives major support from UNESCO.

But while it is clear that all these fragmentary initiatives are useful and interesting, they cannot replace a global and in-depth examination of the remaining problem. This is the preparation of hundreds of thousands of young people for the exercise of their difficult but so necessary and so passionately interesting profession.

It is not too late to “roll up our sleeves” and to make up for the years already lost with some really serious thinking. □





News from the Light Brothers.

A box measuring 2.16 x 0.90 x 0.22 metres, kitted out with six 400-watt halogen metal vapour lamps: prototype sample of 150 of what are possibly the largest ceiling wash-lights in the world.

This pent-up bundle of light is so powerful that the men from our development department have to wear goggles when dealing with it.

But where would you use that much light?

In a very remarkable building indeed — the new passenger terminal at London's Stansted Airport.

Architect Norman Foster and lighting designer Claude Engle have rigorously pursued the principle of

light as the fourth dimension, heralding a new architectural concept — incandescent ceiling.

The light sources are installed in such a way that the entire structure glows. And despite the



ERCO Lighting
Limited
38 Dover Street
London W1X3RB
Telephone:
071-4080320

the fittings themselves
in invisible.
ere we have a case
non-design". Technology
ght, with not a frill
ght. Just the stuff for
technical boffins — our
ktank" in our factory

of light: Lichtfabrik.

Projects of this sort
extend us and take us
further.

And the things they
teach us ultimately filter
through into our standard
products.

Committed to the prin-
ciple of light as the fourth
dimension of architecture,
we fashion every one of
our product ranges into a
thoroughly thought-out
means to an end.

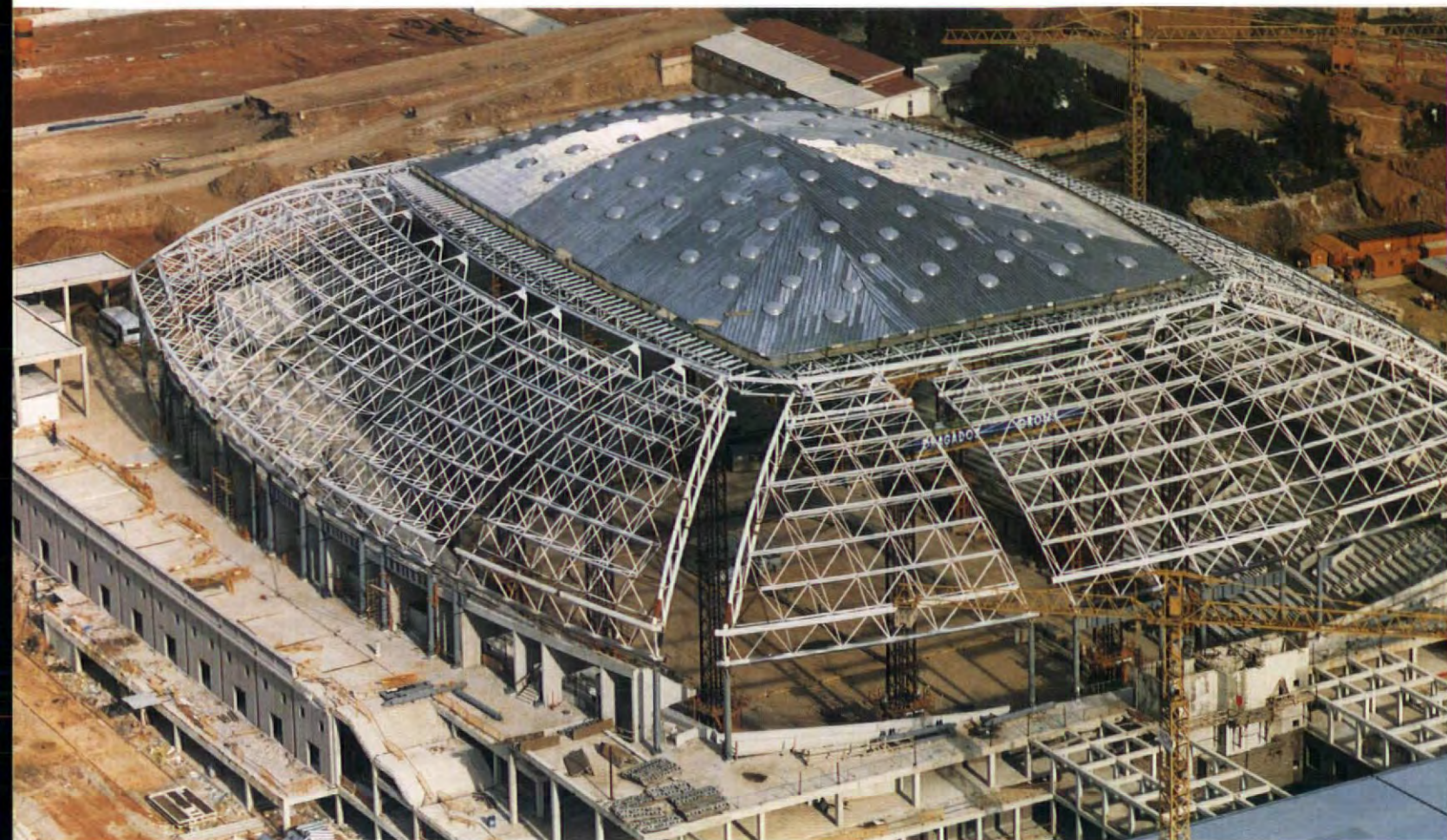
Even the simplest Erco

light fitting is an instru-
ment with which to mould
light.

As the fancy takes you.

ERCO
Die Lichtfabrik.

ORONA CONQUERS SPACE



And erects space structures, of all types and sizes. Wherever they required.

Because ORONA is perfectly qualified for finding and developing the ideal solution for any of your projects.

Without limiting your imagination.

That's why ORONA's at the top.

And that is also why it has been chosen to cover the Barcelona 92 Sports Palace.

If you have space you want to conquer, consult ORONA about it.

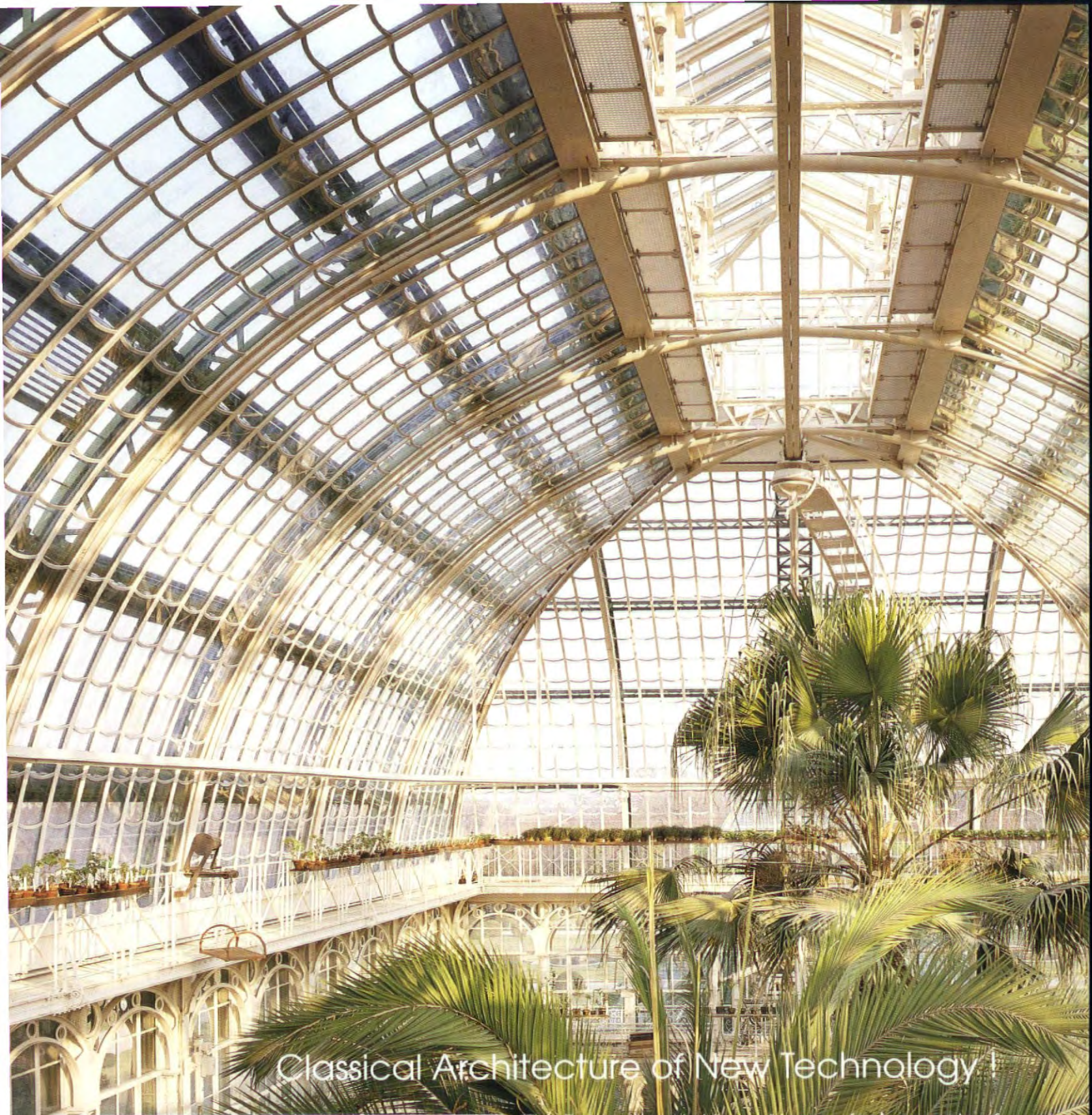


ORONA

LIFTS AND SPACE STRUCTURES

ORONA S.Coop. Ltda.
P.O.Box 1312
20080 San Sebastián (SPAIN)
Phone: 34-43-551400
Fax: 34-43-550047

T H E C O N Q U E S T O F S P A C E



Classical Architecture of New Technology !

The Palmenhaus in Vienna is a perfect example of the application of modern glass technology to the revitalisation of classical architecture. The original appearance of the building has been retained using overlapping "fish-scale" effect insulated glass units, enamelled on both sides. Just further proof of forefront technical know-how being manipulated for such an individual project.



Palmenhaus - Vienna

Alu-Work Baumann - 1886

Think clearly about glass.

ECKELT GLAS

Brüder Eckelt + Co Glastechnik GmbH A-4400 Steyr, Resthofstraße 18
Tel. (0 72 52) 67 7 71, Telex 02-8166, FAX (0 72 52) 63 30 324

CHANGING SPACES

Elegant,
contemporary
lines of
relocatable
partitions and
integrated



ceilings
making
versatility
the byword
of modern
working spaces.

CLESTRA
HAUSERMAN 



CHASE MANHATTAN BANK, BOURNEMOUTH

FULLY ASSEMBLED AND GLAZED CURTAIN WALLING
11'000m² WITH GREEN BODY TINTED GLASS

DEVELOPER	: CHASE MANHATTAN BANK
ARCHITECT	: THE THOMAS SAUNDERS PARTNERSHIP
MAIN CONTRACTOR	: COSTAIN CONSTRUCTION LIMITED
CURTAIN WALLING	: HANS SCHMIDLIN (UK) LIMITED

SCHMIDLIN

HI-TENSILE CABLES

**DESIGNED FOR
ARCHITECTS**

The company designs and manufactures purpose-made tensioners and terminations for high tensile cables and tie rods, specifically for architectural and structural requirements, and specialises in developing products to suit specific applications.

**HI-TEC BUILDING
CONSTRUCTION**

1990 installations range from the 0.9mm diameter wire screen on the new African Aviary at London Zoo to the 26mm diameter roof trusses on the Rotunda at the Port Arcades, Ellesmere Port, UK.



**GUY LINKING
LIMITED**

5 Court Farm, Stutton Road, Brantham, Manningtree CO11 1PW
Tel: 0473 327388 Telex: 987703 Fax: 0473 328320



GLASS & METAL ARCHITECTURE



*A clear view
on the Future*

PORTAL has won an enviable reputation for reliability and expertise in designing and manufacturing glass & metal architectural structures.

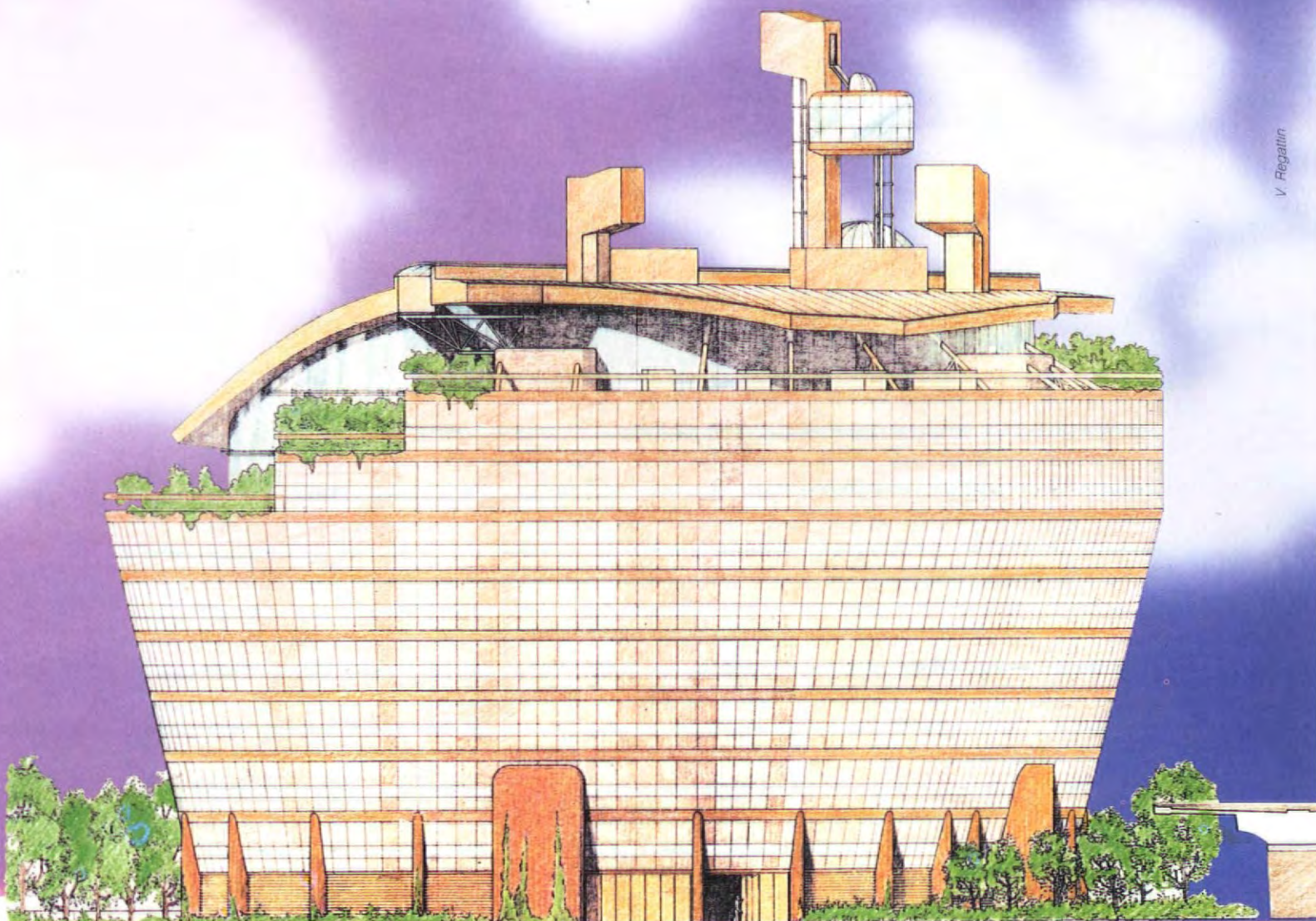
PORTAL provides a comprehensive range of services and products, including support structures with aluminium glazing systems, integrated access and cleaning equipment also fully automated smoke venting installations. Contact your partner

PORTAL

SOCIÉTÉ ANONYME

Rue des Deux Gares 120, B-1070 Brussels - BELGIUM
Phone (010) 32 2 521 00 46 • Fax (010) 32 2 521 01 76

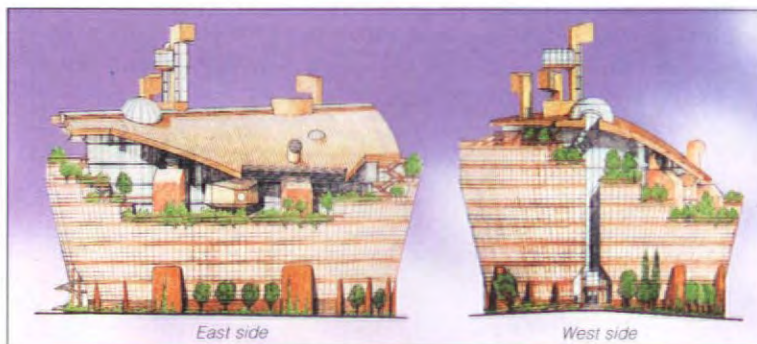
Offices in Belgium, France, Netherland, Germany,
United Kingdom.



"Noah's Ark" - Office Development, Hammersmith, London - Project: Arch. Ralph Erskine, Rock Townsend, Lennart Bergström - Property: Pronator AB, Ake Larson Byggare AB - Project Management: Ake Larson Ltd, London

AN ORIGINAL PROJECT DEMANDS AN INNOVATIVE COMPANY

6000 sq.mt. of Structural Glazing and Facade Cladding installed to varying curves and inclined from the vertical axis. The challenge to find the technical and production solution was met autonomously by the design team at HALLMO, making it one of the most prestigious projects undertaken.



Structural glazing • Curtain walls • Modular cladding • Architectural metal works in brass, copper, bronze, stainless steel to suit individual requirements, Aluminium windows and doors.



CHADSWORTH COLUMNS

Our wooden Authentic Replication columns and pedestals follow the specifications derived from 15th century Renaissance master architect Vignola. Also, Architectural Stock, Art Deco and Contemporary columns in pine, redwood and other wood species. **CHADSWORTH — Expect the Best!**
Brochures \$10.00 U.S.
Telephone 404-876-5410
Telefax 404-876 4492
RESPONSE NO. 6



CROSS VINYLattice

CROSS VINYLattice

Available in three weights, four patterns and ten colours, there is a CROSS VINYLattice product suitable for any functional or decorative application, interior or exterior. Colour pigments and a UV inhibitor added to the material during the extrusion process lend a finely finished appearance and assure this lattice will never need painting. Unlike wood products, CROSS VINYLattice is easily installed, saws cleanly and takes nails or screws without splintering or cracking, and is reinforced for impact resistance and durability. It is impervious to molds, fungus, dry rot or termite infestation. Under conditions of normal use it is virtually maintenance-free.
For more information contact Cross Industries, 3174 Marjan Drive, Atlanta, Georgia 30340, U.S.A. 404 451 4531.
RESPONSE NO. 9

AMTICO

The latest designs from 'Amtico' are a spectacular new collection of inlaid border tiles. The Wooden Inlaid Borders can be used in conjunction with The Wood Collection, now in nineteen colourways, and these borders include leaf motifs, rope chains and interwoven, hexagon patterns as well as diamond inlays and simple stripping. The extensive range of borders are also available in Marble and Granite finishes.
Kingfield Road
Coventry CV6 5PL
Telephone 0203 665615
RESPONSE NO. 2



DELABOLE SLATE

The Natural Choice
Four centuries of quarrying experience has created a range of durable products which are second to none.
Delabole Slate **Flooring** not only looks beautiful it will last a lifetime, and is available in either polished slab form or naturally textured 'riven' tiles.
Choose Delabole Slate for premier **Worksurfaces**. Superb in kitchens, bars, reception areas etc, slate slabs are practical and hygienic, as well as aesthetically appealing.
Other quality slate products available from Delabole Slate include, virtually everlasting sills, fireplace features, walling stone, hard-wearing paving and personalised nameplates.
Pengelly Road
Delabole, Cornwall PL33 9AZ
Telephone: (0840) 212242
Facsimile: (0840) 212948
RESPONSE NO. 11



**PAVING DESIGN
IS BECOMING
LESS CONCRETE.**



Grassrings
vehicle parking • firelanes • utility access

Fax for free brochure today! (USA) 303-696-9757

International Phone: 303-696-1510
USA & Canada Phone: 800-428-1333
Rings, Inc., 7700 Cherry Creek South Drive, Unit 6
Denver, Colorado 80231 USA

WE ARE SERVING ARCHITECTURE WORLD WIDE

Custom orders of
metal constructions, also
from architectural desing,
made of stainless steel,
bronze, brass, tombac
(a red brass-alloy), light metal

Cooperations with

**ARCHITECT
PROF.
PEICHL:**

KUNSTFORUM

Vienna, Austria

Doorways in bronze, a golden ball
and metal crowns on stone-columns

**BANK für TIROL und
VORARLBERG**

Vienna, Austria

Shop-windows and doorways in bronze

**STÄDEL'SCHES
KUNSTINSTITUT**

Frankfurt, Germany

Banisters, canopies and plinths
in high-grade steel



METALLBAU TREIBER KG

A - 8020 GRAZ · P.O.B. 342 · AUSTRIA

TEL. 0316/91 19 70-0 · TELEX 311323 · TELEFAX 9119 70-30

WORLD ARCHITECTURE

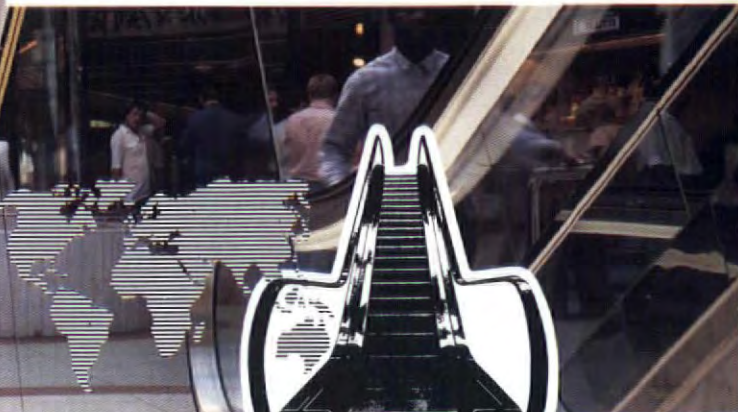
ADVERTISERS INDEX

17	Allianco Enamel	1	2/3	Hoechst AG	20
94	Amito Co	2	23	Junkers Industries A/S	21
26	Arbed SA	3	13	Koller (UK) Ltd	22
7	Baldwin Hardware Corporation	4	IBC	Kone	23
25	Canobbio SpA	5	95	Metallbau Treiber	24
94	Chadsworth Inc	6	15	Modernfold Inc	25
90	Clestra Hauserman	7	14	Nippon Electric Glass Co	26
18/19	Concord Lighting	8	IFC	O & K Rolltreppen	27
94	Cross Industries	9	88	Orona Coop Ltd	28
21	Darby Group Plc	10	4/5, OBC	Pillar Naco Industries Europe	29
94	Delabole Slate	11	92	Portal SA	30
89	Eckelt Glass	12	16	Profalco SRL	31
86/87	Erco Lighting Ltd	13	94	Rings Inc.	32
8	Euromalco	14	24	Serrature Meroni	33
10/11	Focchi SpA	15	9	VCR International SRL	34
20	Gema Bavelemente AG	16	12	Vitral International	35
92	Guy Linking Ltd	17	6	Zarges Leichtbau GmbH	36
93	Hallmo	18	22	Zumtobel Lighting Ltd	37
91	Hans Schmidlin (UK) Ltd	19			

Scenic Science.

Polished glass, gleaming metal, quiet efficiency. Activity. Integrated transportation systems on vertical, inclined and horizontal planes at their best, helping to create dynamic, spectacular interiors. For elevator, escalator and autowalk requirements worldwide you need two names: KONE and O&K.

KONE and O&K.
Worldfamous quality and integrity of design.



KONE

Product, company and contact information available from local KONE Elevators companies or:
KONE Elevators
KEE Customer Information Service
P.O. Box 8, SF-00331 Helsinki, Finland
Fax 358-0-475 4319, Tlx. (57) 122848 kone sf

O&K/KONE
Escalators & Autowalks
O&K Rolltreppen GmbH (see inside front cover)





NACO SUNBREAKER: AN INTELLIGENT ANSWER TO SUNLIGHT

Whenever you have the problem of controlling sunlight, NACO proposes an adjustable or fixed sunbreaker with aluminium blades of 15, 21, 30 and 45 cm width.

The NACO sunbreaker is available in different colours, it is easy to assemble and does not need maintenance.

For more than 30 years the adjustable NACO sunbreaker has had much success all over the world thanks to its manifold use, functional working and great structural elegance.

ENRICO SEGRE

naco
PILLAR NACO ITALY

00198 ROME (ITALY)
Corso d'Italia, 35/B
Phone (06) 84.15.766 - 88.42.136
Telex 626433 NACORM
Telegr. NACOLITE
Telefax (06) 88.45.197

A MEMBER OF RTZ-PILLAR

I.M. P.
LIBRA