

WORLD ARCHITECTURE

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Malaysia Focus – higher, longer, faster

Ken Yeang's vertical aspirations

Hotels – cashing in on a boom industry

Starck and Schrager fantasy and finance

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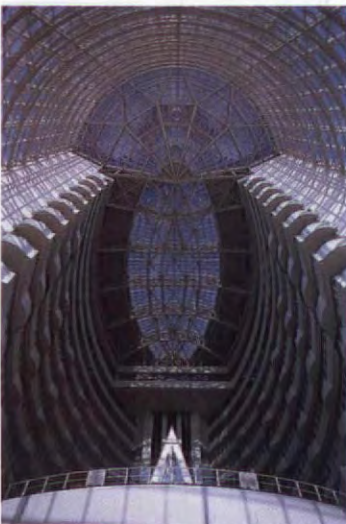


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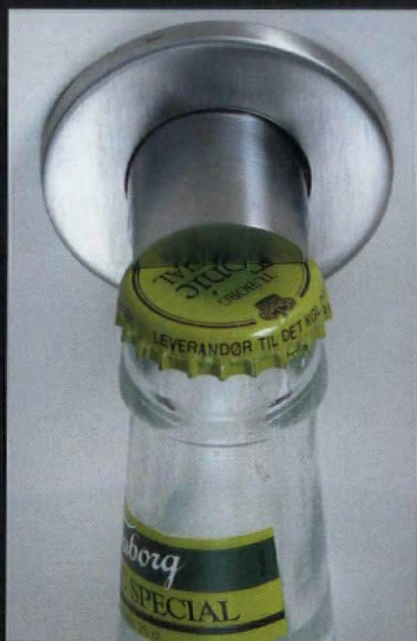
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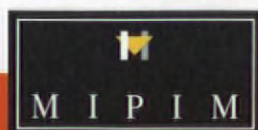
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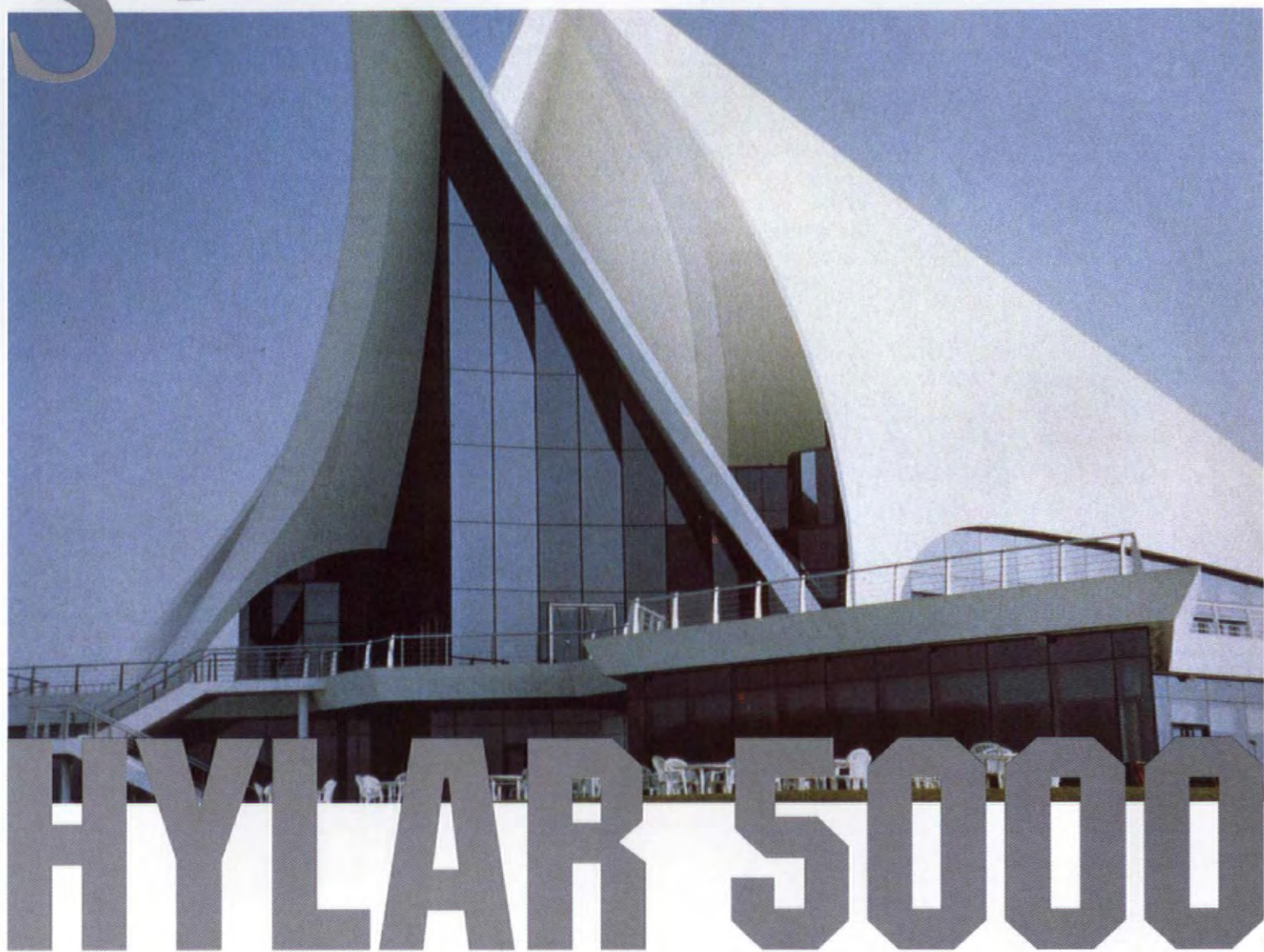
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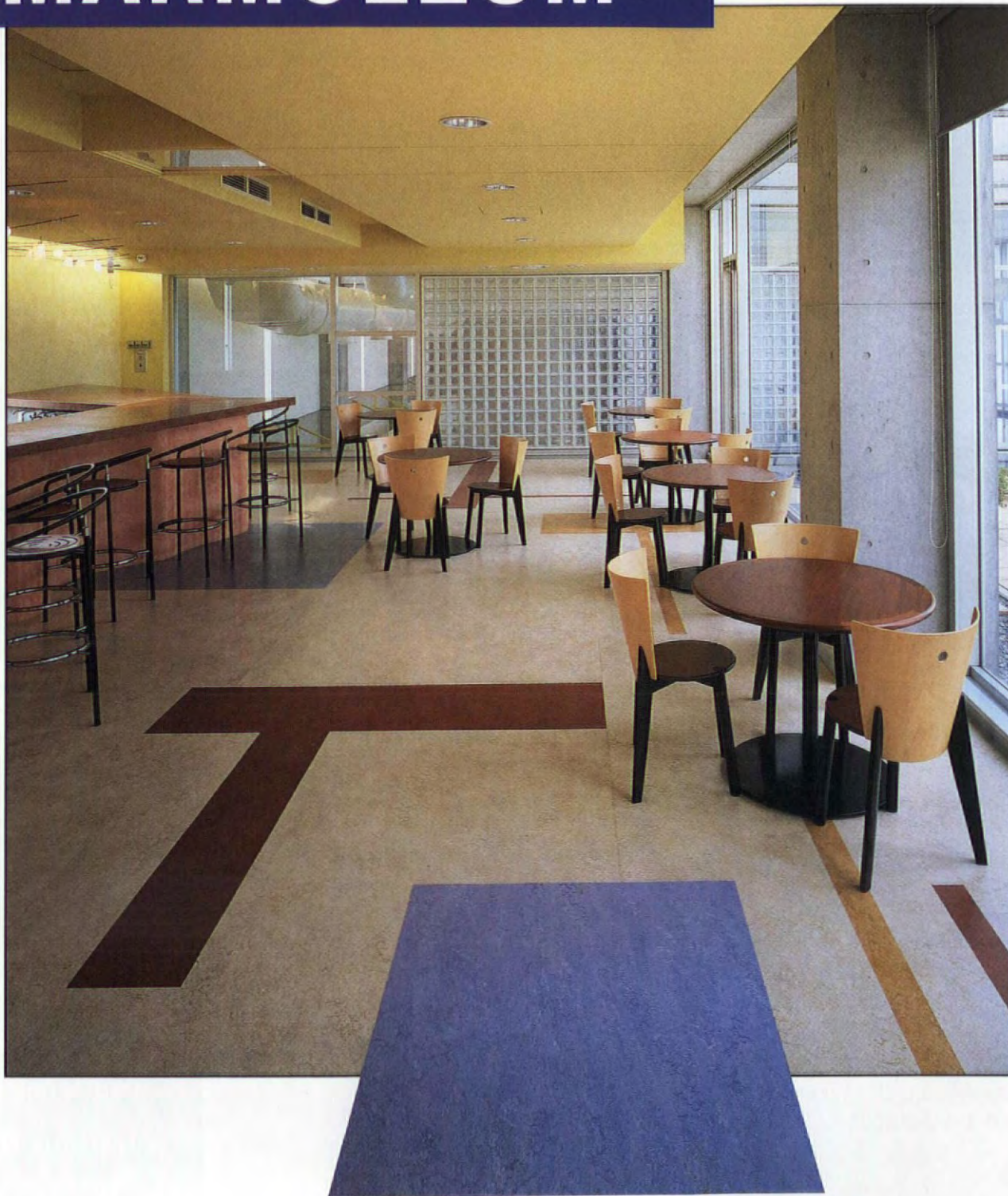
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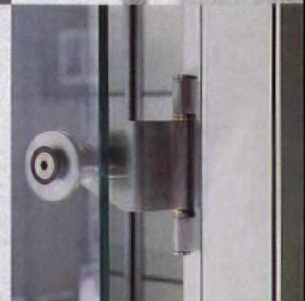
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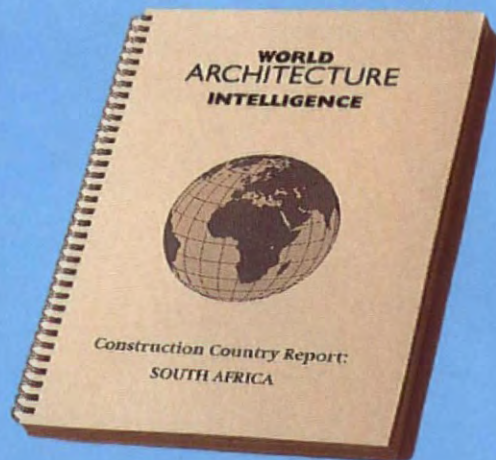
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WORLD ARCHITECTURE

A case of too much, too soon?

Malaysia's race for economic growth and the sought-after accolade of "developed nation" by the year 2020 has created a palpable sense of tension and excitement in the country's architectural community. It is easy to criticise the apparent abandon with which skyscrapers are hastily thrown up, some with ridiculous acropolis temples at their apex, and others simply adorned by as many antennae as are needed to break the relevant height records. But while this all represents profit and profile for the architects involved, it also fills them with a sense of panic, and impending doom. How long can the country sustain such a prolific building programme, and what will be the long term effect on these designers' careers? Every firm visited by *World Architecture* this summer admitted to turning away work on a regular basis – several of them planning trips overseas to ensure quality recruiting for projects they could not afford to turn down. As a result of the pressure for fast-track construction, buildings of inferior quality are accepted without complaint. One architect described the situation as designers getting "spoilt, complacent...not enough attention is given to detail..." The blame is also parked at the door of the clients: "In Malaysia we allow clients to wallow in their mediocrity."

But there is more to this than meets the eye. Malaysia, as we know it, is in its infancy. Judging the quality of its architecture in relation to projects by contemporaries overseas is to miss the point. The country was not prepared – educationally or in terms of a skilled workforce – for the economic boom. The Prime Minister understood that he must have tangible evidence of financial growth, and high profile building projects to attract the investment required for subsequent work on vital infrastructure facilities. The latter is now being put in place, but the whinge still resounds that the city is no more than an accumulation of office blocks on island sites, with no historic city centre, or sense of identity. This was the cry that went up when Olympia & York invested in London's Canary Wharf in the late eighties. The success that this previously criticised scheme is now reaping should silence the cynics. Canary Wharf, despite its long wait for infrastructural links to the heart of the city, is coming through. Kuala Lumpur should expect much more from its investment, for while the money is being accumulated for the transportation network, business is already flourishing. Developers are the victims or the victors. Architecture has always been a risky business. Now is the time for architects to grab the opportunities presented by both economics and politics. Malaysia is the place.

Nicola Turner.

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BUSINESS

International news, reviews and previews.

OnScreen keeps abreast of the latest developments of computer-related innovations.

WORLD ARCHITECTURE EXCLUSIVE – The 1997 WORLD SURVEY

The 1997 Survey of the World's 250 Largest Architectural Practices and Design Firms.

For the first time, the annual *World Architecture* World Survey will be published within the pages of the magazine. With 250 practices included, the survey is more representative of the world's largest architectural firms than ever before. The wealth of information available includes staff numbers, fee ranges and contact information, as well as comprehensive graphic information showing the change in activity share by region and by market sector.

The survey is broken down into three sections: *Giants and Favourites* including an interview with Arthur Gensler, of Gensler and Associates, the largest firm of architects for the second consecutive year; *The Figures (and what they mean)* the focus of which is the WA Top 250, according to the number of fee-earning architects per firm, and *Company Profiles* World Architecture's essential reference to global architecture, planning and design expertise.

The World Survey of the Top 250 Architects takes the place of the Country Focus in the next issue. Future Country Focuses include Mexico in February, Italy in March and Israel in April.

SPECIAL REPORT – Offices

What does the design of a corporate headquarters building say about its occupants? Given the quantity of unused office space in urban centres worldwide is there really a need for more new office developments? Jeremy Melvin reports on the changing face of international office design. Plus reviews including Reichen and Roberts renovation project for Nestlé in France; Webler + Geissler's environmentally sustainable Götz Headquarters building in Würzburg, Germany, and HOK's Telecom Tower in Tokyo, Japan.

Further Special Reports will cover Bridges in February, Industrial Buildings in March and Museums and Galleries in April.

PRODUCTS – The office environment

Nicky Churchill visits Cologne's Orgatec fair and reviews new office furniture systems from around the world. Conway Lloyd Morgan talks to Jean Nouvel about his designs for Unifor and Bülo.

In subsequent issues, Products will focus on Building Services in February; Interior Finishes in March and Hard Flooring in April.

M. Lorenzetti



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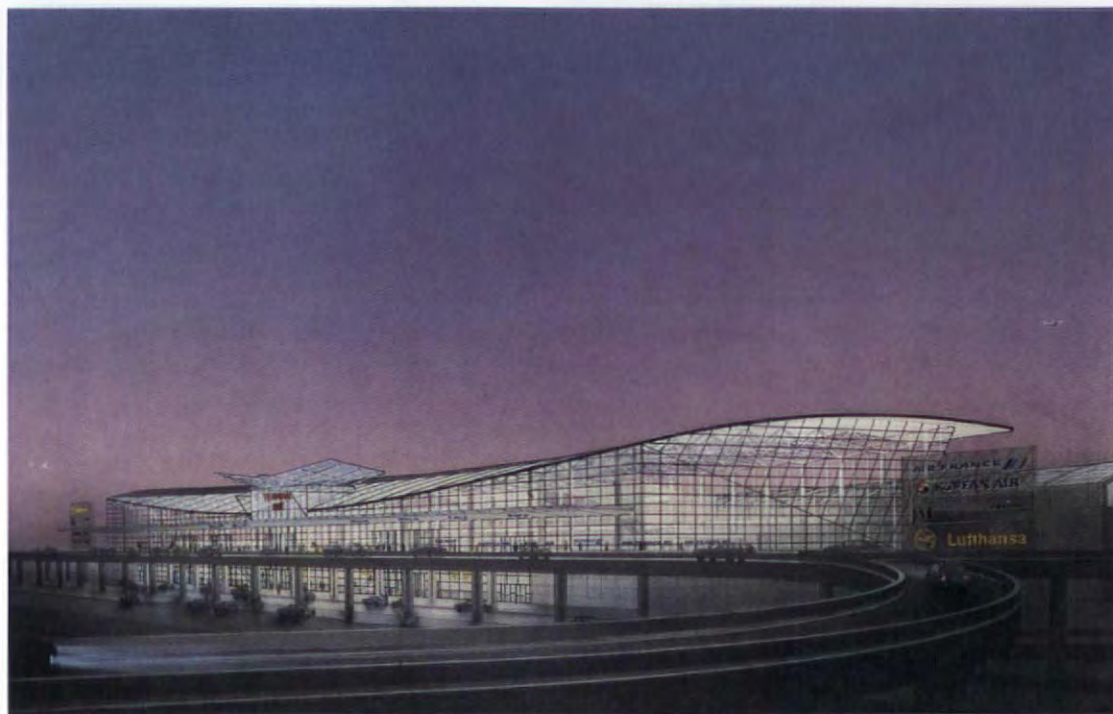


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News Review

WA's News and Business round-up

WNB+A to build new JFK terminal



Terminal One Group Association (TOGA), a limited partnership between Air France, Japan Airlines, Korean Air and Lufthansa German Airlines have negotiated the lease and commissioned all design and construction services on the new Terminal One at New York's JFK airport.

William Nicholas Bodouva + Associates (WNB + A) have been chosen as the architects on the airport's first new

terminal for 25 years. The structure's "swooping" roof line is intended to evoke sensations of air travel. Its prominence at the entrance to the central terminal area will have a dramatic impact on the visual impression created by the airport.

The new structure – to be completed by 1998 – will replace the 36-year old Eastern Airlines terminal which has already been demolished.

With an anticipated 3.5 million passengers travelling through the terminal annually, WNB + A have been required to draw on their 35 years of experience in airport architecture.

Although the airlines of the TOGA collective will be the principal occupants of the building, it will have the capacity to accommodate the operations of additional airline tenants, both foreign and domestic.

Advanta focus on UK developments

Advanta Management, the German property company controlled by Mr Dieter Bock, chief executive of Lonrho said that he had decided against an early sale of his 90 percent interest in Advanta because of the poor state of the German market. "It will take two to three years for the German market to come back. It is not a good time to sell." Although he has reduced the company's exposure to its home market in anticipation of a downturn in rents and values, Advanta is still working on developments in Germany, some of them on a project management basis for institutional investors.

Mr Bock is now focusing on the UK for potential office or residential developments. Number 1 Poultry their latest joint venture project with Lord Palumbo (former chairman of the Arts Council), is due to be completed next spring. Mr Bock wants to keep the London Advanta office after the completion of Poultry which is one of the first speculative office developments since the property crash of the early 1990s. In the hotel market, Advanta sold its majority stake in the Kempinski luxury hotel chain due to potential conflicts of interest with Lonrho which is planning to float its Princess Metropole hotel.

Future Systems take a new look at Lord's

Lord's, London, the headquarters of international cricket, is to have a new media centre. The winners of the limited competition are Future Systems whose futuristic design will be a striking addition to a ground already boasting several notable new structures. The elliptical structure will be located opposite the pavilion, allowing 250 broadcast and print journalists uninterrupted views of the action. The all-aluminium, glass-fronted building, whose skin is an integral element of the structural system, will be built off-site, in a boatyard.

When questioned as to how such a

radical structure came to be chosen by such a traditional club, Roger Knight, Secretary of the MCC (Marylebone Cricket Club), replied that the club's recent involvement in contemporary architecture – Nicholas Grimshaw's proposed grandstand, the Mound Stand by Michael Hopkins, and David Morley's cricket school – have been so successful that the club have no doubts about the suitability of perpetuating the relationship.

All being well, construction may start as soon as January/February 1997. The Centre will be completed in time for the 1999 Cricket World Cup final.



Gehry for Düsseldorf riverside

by Layla Dawson Germany correspondent

As part of Düsseldorf's development of the Rhine promenade Frank Gehry has designed an office complex, to be called the Neuer Zollhof, for clients Kunst und Medienzentrums Rheinshafen GmbH. Three separate broken building masses clad in contrasting materials, with sloping walls and asymmetrical profiles, will provide 28,000 square metres for DM180 million and become one of the main features of the new "Creative Mile" along the river bank. The initiators of the scheme, Philip Holzmann, Germany's biggest building contractor, and Thomas Rempfen, owner of an advertising agency, will take over two of the office blocks and the Gerling insurance company from Cologne will occupy part of the third while letting out the remaining space. Thomas Rempfen has long been criticised for insisting on quality architects and



architecture for this dilapidated and previously under-developed part of Düsseldorf but his persistence was rewarded when work began on site, on Friday 13 September – hopefully the traditionally unlucky date will not unduly influence

progress. At a time of economic standstill – some would say recession – in the property sector perhaps it says something for the quality of Gehry's architecture that even before completion the complex is fully occupied.

Lifschutz Davidson on the South Bank

Lifschutz Davidson's Oxo building project – part of the Coin Street community development – on the South Bank of the River Thames, London has taken further steps towards completion.

The firm's restaurant for the Harvey Nichols department store, on top of the Oxo building, opened in September this year. Lifschutz Davidson have now been commissioned to tackle the reordering of traffic and pedestrian movement between Waterloo station and the river, to create a new and civilised arrivals area for Eurostar and other rail travellers.

They have also just won, with WSP Consulting Engineers a competition to design the Hungerford footbridges across the Thames at Charing Cross. The scheme consists of multiple cable stayed structures. The project costing £15.5 million will form the basis of a detailed submission to the Millennium Commission.

In brief

AUSTRALIA

Bellini beats the best

The competition for the extension and redesign of the National Gallery of Victoria, Melbourne has been won by Mario Bellini Associates. Bellini's winning proposal to design the 50,000 square metre extension – to the existing 24,000 square metre structure – beat off tough opposition from Pei Cobb Freed, Arata Isozaki, Jean Nouvel, Michael Wilford and Foster and Partners. When complete, the extension will house conference rooms, retail outlets, restaurants and a banquet hall/ballroom.

BOSNIA

Reconstruction initiative

The World Bank has approved US\$75.6 million in credits for emergency office reconstruction projects in Bosnia-Herzegovina. There are now 12 emergency projects in the region funded by Bank credits. The funds will be used for land mine clearing, housing repairs, electric power, public works and employment and the demobilisation and reintegration of former combatants.

JAPAN

Military investment

A consortium that includes the Japanese bank Nomura International has won the contest to buy Britain's military married quarters in a privatisation deal worth £1.6 billion (US\$2.4 billion). In an attempt to deflect criticism of Nomura's involvement, the company's spokesmen argued that most of the financing would come from the four British institutions. "It will be British managed, British registered and pay British taxes" and the Defence Ministry will lease back the properties from the Annington Homes consortium under a 200-year deal. The Army Families Federation which fought the sell-off said it was now resigned to the sale although the Ministry of Defence was aware of the opposition of Service families to realise the capital value of the land and homes that make up the married quarter's estate. Most of the money will be used to offset the cost of orders for new equipment for the Forces.

THE PHILIPPINES

Fort Bonifacio joint venture

A Memorandum of Understanding between the Fort Bonifacio Develop-

ment corporation, First Pacific Davies Property Management Inc, and the Bases Conversion Development Authority was signed on 17 September 1996 to establish a joint venture company: Bonifacio Estate Services Corporation to provide services to "Fort Bonifacio Global City", Metro Manila.

The joint venture's role will be to provide property services and maintenance support to an entire city which is to be built on the site of Fort Bonifacio, a 440 hectare former military camp occupied by the Philippines armed forces.

UK

Manchester "bomb" results

Shortlisted architects for the £21million (US\$30m) project to redesign Manchester's city centre following the IRA bomb in June are Halliday Meecham; Llewlyn Davies; EDAW; R James Chapman and BDP. The winner will be announced this month.

USA

Booming suburbans

A recent market survey by Cushman & Wakefield, the New York City real estate firm, claims that suburban locations appear to be attracting office

developments again. The vacancy rate in suburban markets dropped from 15.1 percent in the first quarter of 1996 to 14.2 percent in the second.

Moscone Convention Center – supply and demand

Gensler Architecture, Michael Willis & Associates and Kwan Henmi architecture/planning Inc have been selected to design the Moscone III Convention Center. The centre is the second addition to San Francisco's convention centre complex at Yerba Buena Gardens. In order to capture its share of the lucrative meeting and convention industry, (the current facility is among the world's most desirable convention destinations and is booked well beyond 2000) San Francisco passed a US\$157 million bond measure in March, authorising design and construction of Moscone III. The original facility was designed by HOK. The first expansion – Moscone II – was designed by Gensler in association with DMJM.

Profit and loss in the corporate States

HLW International and construction firm Sordoni Skanska recently took on a commission with a difference. When

From office to hotel/arcade



The British/German firm of architects Sidell, Gibson, Schäfer and Partner (SGS + Partner), together with Hamburg-based Ockelmann, Rottgardt and Partner (ORP) are preparing plans for the redevelopment of the Levantehaus, 7 Mönckebergstrasse, Hamburg, Germany.

The Levantehaus was originally built in 1912/13, by architects Franz Bach and Carl Bense, as the office of a shipping line. It will be developed as a shopping arcade and luxury hotel,

with space for residential apartments. The hotel, sited between the second and sixth floors, will be developed by Hyatt International.

SGS + Partner and ORP plan to re-style the building in its original form. This task has been made more complex due

to war damage, as well as extensions and rebuilding over the years.

The existing steel and aluminium windows will be replaced by wooden windows, with the original divisions. The roof, which suffered extensive war damage, will be reconstructed to create space for two attics and a mezzanine floor. The inner courtyard will be covered by a steel-glass roof at second floor height. This will form an element of the shopping arcade.

Bangalore goes Platinum

The Thadani Hetzel Partnership of Washington DC, USA and Bombay, India have designed Platinum City, a "traditional neighbourhood development" at Twin Lakes, near Bangalore, India with consultants Andreas Duany and Elizabeth Plater-Zyberk. The project



– which has an estimated total budget of US\$250 million – is under construction on site.

The 90 acre site, bordered by two lakes, will be linked to central Bangalore by the one kilometre long Sarjapura Road. When complete Platinum City will house 500,000 square feet of office space, 175,000 of retail space and a hotel. The residential districts surrounding the commercial zone will provide 4,500 two- three- and four- bedroom dwellings. Civic buildings

will be located throughout the development, and will include primary and secondary schools, community centres, club houses and sports facilities.

Building heights will be seven, ten and 14 storeys. The tallest will be located on street corners to emphasise major intersections. Public gardens will be located throughout the development, and a lake-front promenade will be created to highlight the natural assets of the location.

the US arm of Swiss-based pharmaceutical and chemical company, Ciba-Geigy placed George Batcher of Ciba Additives Laboratory in charge of overseeing the building of the company's new laboratory he was told that "every dollar must do effectively what it's supposed to do". After talks with Batcher, Leevi Kiil of HLW agreed that the design firm would forego 30 percent of its profit if the design didn't meet predefined criteria for quality and performance. Whether this arrangement sets a precedent for architect's building in corporate America, or simply represents a tremendous sense of self-belief on the part of HLW remains to be seen.

US\$210 million contract for JA Jones Management Services

JA Jones Management Services company is to work at the US Defense department's second largest facility at the Naval Submarine Base in Kings Bay, Georgia. The US\$210 million contract had an available award fee of US\$2 million per year and the project is estimated to last for five years from this October. JA Jones will employ 700 full-time employees responsible for project management, engineering and design, construction and operation

and maintenance of utility plants and systems, which include electric power production, distribution, steam water and domestic sewage and industrial waste water. The contract, one of the largest of its kind, also includes maintenance of security, grounds, cranes, family housing, food services, fire prevention, emergency medical technicians, railroad operations, recreation, welfare and more.

Mall Mania in New Jersey

The Arlington, Virginia-based mall developer, Mills Corporation has announced plans for a 2.1 million square foot discount megamall in Meadowlands, one of the last major urban wetlands near New York City.

Trumping New York

New York Stock Exchange officials have announced that they have run out of space in their historic building in the Wall Street district of the city. Developer Donald Trump has proposed a new technically advanced building to house the Stock Exchange, as well as a new 120-floor office tower next to it. Kohn Pedersen Fox Architects' "tentative" plans for the 700,000 square foot Stock Exchange pavilion include a 120,00 square foot, column free, trad-

ing floor, approximately 50 feet high, raised on a podium. The 3.4 million square foot tower will stand at 1,792 feet and be topped by a 400 foot antenna. The 120 floors vary in size from 50,600 square feet at the base to 5,600 square feet at the top.

The Lost Archipelago: Governors Island competition results

All of the 80 proposals received were considered in an open session in August this year, held at the Galleria Frau in New York. First prizes – US\$1,500 to each participant – were awarded to Brooks Howell and Merrill Aldrich; Simon Koumijianii, Christopher C Kirchner and Franz Fantauzzi, and Whit Middlecoff and Eric Anderson, all of the USA. Other prizes were awarded to entries from Korea, France, Poland and Yugoslavia.

The exhibition will tour internationally for the next 12 months.

SAUDI ARABIA

KPF competition entry for the Kingdom Trade Centre

World Architecture have had an early sight of KPF's entry for the Kingdom Trade Centre competition, Riyadh. The competition brief is to accommodate a range of residential, hotel

and office functions in the centre of the city. In response to the extreme Saudi climate where summer temperatures are often above 40 degrees centigrade, the building KPF have proposed is a 300 metre tower organised around a series of shaded internal garden spaces. Service risers and elevators are set in three perimeter masts that provide the primary support to the structure.

ERRATA

The Czech Country Report – WA 46, May 1996

Local consultants Brix & Franta were engaged by Scott Associates, the Canadian firm who are Managing Architects for the new Prague Airport. Scott Associates have been actively involved with the planning and design of the project since 1988 and were exclusively responsible for the overall concept design of the project.

"Real Prizes for Virtual Work"

OnScreen – WA 49, September 1996. The winning entrants of Graphisoft's ArchiCAD student competition – Paul Bo Peng and team – come from Australia (University of Sydney), not Austria as stated.

Seoul attraction for Fox & Fowle

Cosmos Co Ltd of Seoul, South Korea have announced that Fox & Fowle Architects, New York, are to design a major new financial centre in the central banking district of Seoul.

Fox & Fowle will design the project, which will replace the existing Cosmos Department Store, in association with local firm Dong Il Architects & Engineers. The centre will contain five retail banking levels, eleven floors of banking office space and three levels of residential office space ("officetel"). The top of the building will house private dining clubs, and the lower levels will contain retail outlets, an athletic club and parking facilities.

The site is flanked by the central pedestrian retail district and by the New Lotte, Midora and Shinsegae department stores. When complete the



financial centre will be linked directly to downtown Seoul by means of an underground walkway.

Occupancy is anticipated in 1998.

Bridges in search of investors



A competition for a habitable bridge over London's River Thames has been won jointly by the Iraqi-born, London-based Zaha Hadid (*top*) and the French architect Antoine Grumbach Architects, (*above*) beating Daniel Libeskind, Future Systems, Branson Coates and Ian Ritchie Architects. But the excitement is muted, particularly for the ill-fated Hadid of Cardiff Bay fame. The £70 million bridge scheme has neither a definite site, funding or developer. Whether either project will ever materialise remains in question. Hadid's design takes the form of a continuous horizontal "skyscraper", in which a variety of habitats co-exist:

living accommodation; recreational and public spaces; social and charitable areas, mixed with commercial venues. The proposal is described as a "city terminal", serving the public 24 hours a day. Both schemes seek to examine the dynamic possibilities of inserting new layers into an existing urban fabric, whilst at the same time fulfilling its practical role as a means of crossing the river. The competition is the focus of an exhibition designed by Branson Coates at the Royal Academy of Arts in London. The show charts the history of habitable bridges, and runs until mid-December this year. (See *Events* listing)

People and Practice

People

King of the critics

Professor Kenneth Frampton has been succeeded by Professor Joseph Rykwert as the President of the International Committee of Architectural Critics, UK.

Company News

UK

AWA open Edinburgh office

Wes McGregor has been named resident director of Advanced Workplace Associates' (AWA) new Edinburgh office. The move is in response to a continued growth in demand for consultancy services in the area.

New associates at Broadway Malyan

Broadway Malyan Architects have announced the appointment of three senior associates: Jeremy Tipping, Alan McCulloch and Ian Wallace, all of whom are based in the firm's Weybridge office, UK. Nigel Hartley has been made an associate of Broadway Malyan Planning.

Grimshaw win Zurich Airport

Nicholas Grimshaw & Partners have won the Zurich airport extension and refurbishment competition. The £200 million development is the firm's first overseas airport commission.

USA

Gruzen Samton Architects Planners and Interior Designers

Jordan L Gruzen, FAIA, and Peter Samton, FAIA of Gruzen Samton Architects Planners and Interior Designers LLP have accepted Scott P Keller as a new partner. Michael Kazan, APA has been promoted as a new principal.

These are the major changes in the most dramatic overall of the firm in ten years. The firm also announced the promotion to Associate Partner of Micheal Gelfand, AIA and Jacquelyn Hill, Comptroller. Coinciding with this, the partnership have announced that Joseph Donovan, AIA and G Lawrence Woodson, AIA have joined the firm as Associate Partners. Gelfand, Hill, Donovan and Woodson join the current group of Associate Partners who

together comprise the firm's core design and management team.

HDR goes home

Henningson Durham & Richardson Inc (HDR) international engineering, architecture, project management and consulting firm have completed the purchase of the company from its previous owner Bouygues SA, Paris, France. HDR had been a subsidiary of the French construction giants since 1983. Speaking after the announcement, Richard R Bell, President and Chief Executive Officer of HDR Inc said "This event delivers ownership of HDR back to the employees and once again makes us a US-based company".

New director at Perkins and Will

Perkins and Will, Chicago-based architects and engineers have named Kathleen M Orser – previously an associate principal – as the new principal and director of the firm's interiors studio, Chicago.

Health conscious HOK

Charles Siconolfi has been promoted from his role as senior principal in HOK's New York office to leader of the the St Louis-based firm's health care department.

HNTB promotions

Kansas-based engineering, architectural and planning firm, HNTB have announced that Craig W Wilson, Margaret A Catlin, William R Hughes and Jose M Diaz have been promoted to vice president status.

HONOLULU

Wimberly Allison Tong & Goo

Ronald J Holecek, AIA president and chief executive officer has announced the promotion of Lawrence M Rocha to corporate director of information services of Wimberly Allison Tong & Goo Architects.

An information technology specialist with a background in architecture and management, Rocha joined WAT&G in 1988. He became an associate in 1991, and a senior associate in 1995. He has been responsible for co-ordinating computer aided design (CAD) and computer standards and operations firmwide.

Two views of the sixth Venice Biennale

by Marcus Binney, in Venice

A new architectural aesthetic bursts on the world at the Venice Biennale – expressive, sculptural and brightly coloured – a world of crazy buildings exploding with Catherine-wheel frenzy, and hardly a right angle or plumb vertical in sight.

The new wave of architecture has been in the making for a decade or more with the work of the likes of Coop Himmelb(l)au, Gunter Domenig, Peter Eisenman, Zvi Hecker, Daniel Libeskind, Alessandro Mendini and Philippe Starck, but at the Biennale, the curator, Hans Hollein, makes them the dominant theme, reinforcing the point with a retrospective of radical design 1960-75.

This is an exhibition, not so much about the latest, greatest buildings as about architects as trend-setters, personalities, designers, stylists and, to use the Disney phrase, imagineers. Significantly, the 30 "Greats" and 30 "Emerging Voices" chosen by Hollein are predominantly individuals rather than practices. For consigning anonymous architecture so spectacularly to the bin, Hollein deserves a medal.

The quality of exhibits in the pavilions follows the ever higher standards of the latest architecture exhibitions, superb models, glorious photographs,

and crisply presented drawings, understandable to a lay audience. This is not architects talking to architects, but proclaiming a message to the media and the world at large.

Conspicuous mainly by their absence are hi-tech (Foster and Piano excepted) and contextual architecture. Too little tribute is paid to the engineers who makes today's architecture stand up.

Taking the most interesting national pavilions in order, Brazil pays a handsome, well documented tribute to Oscar Niemeyer, Canada brings novelty, not to say gymnastics in the work of Patkau Architects. Finland shows off the work of Leiviska in stunning photographs, France has some exciting models of projects by a new generation of young architects. Japan, under Isozaki, has a crowd pulling presentation of the Kobe earthquake. The Nordic countries have an in-depth survey of young architects, though I would not agree with the Dane who described Hitler's Atlantic Wall as an "immense technological achievement", built as it was substantially with slave labour.

Germany has an inspiring display of abandoned industrial workings, preserved and romantically replanted as public parks. Russia stuns with photographs of national monuments and an



Musikgymnasium Schlobb Belvedere, by Thomas van den Valentyn, one of the 30 "Emerging Voices" chosen by curator, Hans Hollein

archive of Russian Utopia. Spain presents a survey of its remarkable programme of building concert halls and restoring nineteenth century theatres. The United States devotes its entire pavilion to a startling record of the patronage of the Disney corporation, putting on show for the first time a fascinating, rich archive of models and perspectives.

The satellite exhibitions are as sumptuous as the Biennale itself. "Architectural Visions for Europe" presents a novel parade of buildings designed for Dusseldorf by six top architects – playing on geometry and transparency, to

make a traditional streetscape in a modern idiom. Hombroich Architektur presents a pioneering transformation of a NATO missile base as an artists' colony. Mario Botta shows off five churches and German Railways offer an astounding view of vast new railway stations, though its hard to see how many of these projects will be built.

This Biennale may be criticised as too much of a fashion show, but it is full of arresting material. And whether you like what you see or not, its mercifully free of the banal and second rate.

Main exhibitions run to 17 November.

by Paul Forbes, in Venice

As a first time visitor to Venice it is difficult not to be amazed by the sheer improbability of this place as a site upon which to build a city.

The latter part of the twentieth century has been characterised by a lack of "vision", in response to lessons learnt

from earlier "visions". This situation is illustrated through the title of this year's Biennale "Sensing The Future, The Architect as Seismograph". It is a disturbing title which hints at the architect of the future as a manager of disaster, suggesting that the forces exerted on society, like earthquakes, are beyond the control of man.

Representations by countries fall into two main categories; firstly collective projects which outline national concerns and secondly key proponents whose individual projects are exhibited.

It is the former exhibits which have the greatest impact. For example; the Japanese pavilion is filled with 30 crates of rubble transported

directly from the Kobe earthquake. It demonstrates the transience of the built environment and the need to maintain communication. The Dutch representation seeks a workable structure for mass housing. The pavilion is carpeted with hundreds of thousands of miniature houses modelled as timber blocks which represent the real need to construct one million new homes in Holland during the next 10 years to meet the demands of an exponentially expanding society.

Many other countries exhibit the work of individuals, much of which blurs into a haze of ideas and forms. The Italian pavilion, a seemingly endless labyrinth, provides a global cross section, although the recurrence of "planes in space" provoke the question of how the renaissance of geom-

etry and form being proposed by many individuals satisfy the physical and psychological needs of the individual; the enclosure of the body from 1:1 to city scale.

The content of the British pavilion is polite enough. However it gives a veiled view of the creative vitality which is present in Britain. To be presented with the British Library as the main exhibit does little to fire the individuals imagination. It is an example of an incomplete piece of history rather than a vision for what the future might hold.

The best moments of the Biennale are when exhibits expose and explore the underlying structure of society and its built expression. Much in the way that Italo Calvino wrote about Venice as a labyrinth of recognisable parts which describe an unknowable whole.



Pierluigi Grandinetti "Il complesso castel novo-forte corazzato nella fortezza di Osoppo: il monumento, il ponte, la scala" from the Italian pavilion

Stefano Tubaro

Structure in the City

by Michael Rowe, France correspondent

When it comes to major decision-making France is still one of the most highly centralised countries in Europe. Yet at the same time it boasts three times as many local authorities relative to population size as any other European state. Paris and its region – the Ile-de-France – continue to suck in population and resources. Across the land nearly 40,000 communes (and the same number of mayors) increasingly try to find common cause – but often still bicker – across municipal boundaries of ever more doubtful relevance.

Against this background a recent study by the French statistics agency INSEE (*"Regard Socioéconomique sur la Structuration de la Ville"* – *Economie et Statistique* 1996-4/5 – no. 294-295) attempts to analyse the major forces shaping and changing the country's urban structures. Twenty or so commentators highlight key themes including the growing dominance of major regional centres such as Lyon, Toulouse,

Bordeaux and Lille, the development of policies to revitalise underprivileged neighbourhoods, and the enabling role played by urban transport networks.

For example, France has introduced a system under which agreements are signed between the central government and local authorities to help improve and develop poor inner city districts, which are then known as *quartiers en convention*. Provision of public spaces, public-sector housing refurbishment and the upgrading of other infrastructures are all examples of the measures frequently adopted.

This type of small-scale local action corresponds to a new attitude of mind – and the more restricted budgets – that have come to replace the big ticket approach characterised by the *Grands Projets* of the former president, the late François Mitterrand. It also reflects a renewed interest in rekindling neighbourhood values in the city. Of more immediate concern, hard-pressed French architects may be able to find



Boulevard des Italiens, Paris, at the heart of the city's business district, continues to suck in population and resources

new commissions in this area, even if they largely reject the idea of architecture as a solution to social problems.

Also, at a time when unemployment remains stuck at some 11-12 percent of the work force and social benefits are under attack, the city as a potential creator of jobs has come to occupy centre stage in French debate on urban structures. The development of service activities – with particular

emphasis on business-to-business services – play a key role in this respect. This is encouraging major French cities to make their working and living environments look as attractive as possible to potential investors and corporate decision-makers.

The Seventh Annual Asia Design Forum

by Christian Breusing, in Bali

The Asia Design Forum (ADF) is a small convention of invited Asian architects who present their work in an annual forum to a group of international critics. The aim is to elicit an intimate discussion on contemporary Asian architecture, taking into consideration as many of the cultural and economic conditions of the rapidly developing local architecture as possible.

This year the 1996 convenor, the Malaysian architect Ken Yeang, invited 18 architects from Malaysia, Japan, Thailand, Korea, Hong Kong and Australia, to Bali, Indonesia. Though the forum did not have a specific theme there were several recurring areas of interest throughout the convention. Each architect was encouraged to refer to only a couple of his/her projects.

South East Asia is under the spell of fast-track building solutions. The speed and breadth of the primarily urban developments is breathtaking, and almost all of the presented projects dealt with the growing demands of large urban structures with regard to either city planning or individual projects



related to inner city developments.

Christopher Law, from Hong Kong, set the scene with a concise plan of ready-made cities for China's ever growing population. His solution reverts to the British city planning of the grid square and the doctrine of "sufficient price", dating back to the early nineteenth century. Rather than adhering to historical principles, Sean Chiao, also from Hong Kong, designed his 150 hectare plan for a new centre for downtown Manila according to the rules of



"profit", operated by international developers. Both solutions reveal an unrelenting pragmatism and an unashamed approach to dealing with future urban realities. Nowhere are they more pressing than in South East Asia.

The Japanese participants, foremost Tetsuo Furuichi, Tadasu Ohe and Kunihide Oshinomi focussed on architecture of a smaller scale. Their projects cultivated previously designated and highly limited urban areas. Every project demonstrated an unusual stan-

Above left Clubhouse, Lakewood Golf Club, China 1996 by Malaysian architect Laurence Loh. **Above** Saikal Pearl Sea Center, Nagasaki Prefecture, Japan 1994 by Tetsuo Furuichi

dard of perfection and level of detailing, celebrating tailor-made solutions to problems, making them difficult to copy or export.

The Asian dialectic of cross cultural generalisation, and at the same time regional determinism, provided the tension at this year's ADF forum.



Virtual Art Works

"Precise projects require precise delineation – open-ended projects, such as for architectural competitions – give more scope for invention and imagination." Steve Bedford's comments on the fixable mutuality of architecture – the anticipated risk that the intuitive competition design will have to be constructed for real – must be familiar to many. But for Bedford and his colleagues at Virtual Artworks these problems exist mainly in two dimensions.

Steve Bedford qualified as an architect, and worked in several practices including Alsop and Störmer, before setting up Virtual Artworks two years ago, in London. He believes that his architectural experience helps him understand a brief more clearly than a pure graphics training would do. Using Alias as a main program running on Silicon Graphics platforms, his team offers both exact realisations, using montage techniques, and hypothetical images, for competitions and client evaluations, for example. Along with Alsop & Störmer he has also provided images for Terry Farrell and others.

For more information contact: +44 171 928 2900

Event of the Year 1997

US\$30 million for a software product that never had a full commercial release was probably the best investment of 1996. Parametric Industries Inc of

Waltham, Massachusetts, paid that sum for the rights to Reflex, the intelligent parametric system developed by Jonathan Ingram and Gerard Gartside of Green-shire Licence Co in the UK. A number of other major software companies were said to be courting Reflex, which has already been used in customised form by various large UK practices. Parametric Industries already market Pro/Engineer, a leading 3D CAD/CAM/CAE application, and their technical and marketing support should make the release of a full commercial version of Reflex a major event in 1997.

Reflex combines full two and three-dimensional modelling capabilities with intelligent management. Thus, changes to specifications result in all relevant elements of the model being updated, since each element in the design is linked to a parametric database. For example, amending a standard door size in one location alters the door wherever else it is used, and updates the required loadings, fire ratings, costs etcetera over the whole building. Time factors can also be introduced into the database, enabling a progressive exploration of the site situation through the construction process. Objects in the Reflex environment have full physical qualities, creating one of the most powerful contemporary design tools for architecture and engineering.

For more information see <http://www.ptc.com>

Fix that Feng

Of course you know that one *fen*, at the sixth grade, equals four *com*. How could you have forgotten the precepts of traditional Song architecture in China? But if you need a refresher course, Andrew I-kang Li and Jin-Yeu Tsou at the Department of Architecture in the Chinese University of Hong Kong are at hand. They have worked with students to convert the traditional rules of wooden building construction into computer models, using AutoCAD programs. Their source is the twelfth century manual *Yingzao fashi*, which codified the proportional rules for formal

wood structures. They point out that computer modelling, which works happily with repeated similar items, is both more economical and faster than conventional model building or drafting in this context. There are very few surviving buildings created according to the traditional rules, and even those show discrepancies and irregularities, as much the result of time as of local custom. Now these anomalies can be identified precisely, by comparing the computer model with the actual building.

This application of computer technology to an established system of building rules is not just of historical interest. It shows that the potential of modern CAD systems to organise and orchestrate a modular building system is as valid now as if it had been eight centuries ago.

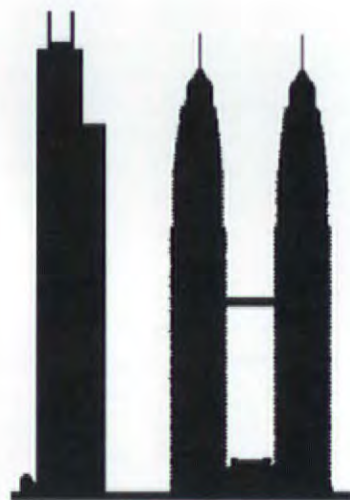
For more information see <http://www.arch.cuhk.hk/yzfs-new/cuhkpape.htm>

Getting ISDN – forget it

Announcements from US Robotics and Rockwell, the main players in the development of modems which link computer systems to telephone systems (thereby allowing access to the Internet and World Wide Web) suggest that the best Christmas present worth having will be one of their 56.6 bits per second modems. Currently modems run at a maximum of 28.8 bps, with 14.4 bps as a norm. The only way to get faster until now has been via dedicated phone lines, such as ISDN lines. The market for ISDN, at least in the USA, has recently become increasingly competitive, but the new modems announced will operate as fast as ISDN over existing paired copper wires. Dedicated lines such as ISDN will still have technical advantages (such as lower risk of signal loss and higher security) but on a cost basis the new modems should pose a major threat, perhaps reflected in recent lower prices for ISDN connections. Readers of Nicholas Negroponte's *Being Digital* will already be aware of the potential of paired copper wires (the standard phone system worldwide) to deliver more data than at present, nice to see that the technocrats have been taking note as well.

Below left Speicher Housing, a public housing project in Hamburg by Alsop & Störmer realised by Virtual Artworks.

Below Comparison drawings of Sears Tower and the Petronas Towers, from the Chicago Architecture Foundation's Web site



Web site of the month

The background image of the Windy City Website is a network of city blocks, overlaid with a selection of different aspects of the city, accessed by words or images. Rediscover the urban landscape of Wright and Sullivan, or inspect Philip Johnson's contribution to the contemporary city. The Chicago Architecture Foundation is dedicated to advancing public interest and education in architecture and design, through a comprehensive program of tours, exhibitions, lectures, and special events, designed to enhance the public's awareness and appreciation of Chicago's outstanding architectural legacy. Currently CAF are canvassing site visitors over the question of "who's the tallest?", setting out the different arguments about whether Pelli's Petronas Towers in Malaysia have toppled the Sears Tower in a bid to be the world's tallest structure. Should the radio antennae be counted as part of the height? Or is the number of floors the criterion? You can vote for your choice, tired as you may be of this argument.

The site is a refreshing change from other city sites on the Web (which often list restaurants ahead of monuments) and a neat echo of one of the first computer visualisations of a cityscape – SOM's wire-frame helicopter flight through the skyscrapers. The site is also home to the CAF Gallery, currently showing an exhibition of perspective drawings. Check it out at <http://www.architecture.org> **WA**

Will a skyscraper make up for the groundscrapers



“Why was such a conspicuous extravagance proposed at a time when conventional white collar employment is set into long-term decline?”

The unveiling, in September, of the proposed 385.5 metre London Millennium Tower marked a new departure in the global race to the skies, but it also raised questions about the shape of future urban development elsewhere. Because the project's architects, Foster and Partners, have been working for more than six years on a proposed 788 metre Millennium Tower for Japan they are clearly aware that engineering opinion holds that, after breaking through the 50-storey barrier, only mounting cost remains a deterrent to pushing on to 456 metres – a height that would comfortably beat the 1996 Malaysian record holder (as well as its predicted successor, the 108 storey Kowloon Nina Tower, Hong Kong). The fact that the English architects did not try to do this indicates, either that nationalist economic symbolism does not lie at the heart of their enterprise, or that cost does. For while it is true that footprint limitations imposed by the site (obligingly cleared by the IRA with their 1992 City of London bomb), might have dictated a practical height limit, in the same way the whole design might have been constrained by the opinions of potential supporters less inclined to be adventurous with the City skyline. A final unlikely possibility is that a statesman-like respect for the fierce self-esteem of the emerging economies of the Pacific Rim supervened somewhere in the corridors of power, dictating that the 1996 Malaysian record holder should not be assailed for the time being.

Be these matters as they may, the cost of the proposed new London Millennium Tower – early estimates put it somewhere between a modest £400 million (US\$600 million) and an implausible £10 billion (US\$15 billion) – also raises an important question. On the face of it, why was such a conspicuous extravagance proposed at a time when conventional white collar employment is set into long-term decline, and large unlet office buildings in London are already being converted into residential use?

The answer here is also instructive. While there are world height record

contenders aplenty among the Tiger economies of South East Asia and Australasia, in the United States, home of the world's former tallest building, the 440 metre Chicago Sears Tower, commercial projects over 20 storeys high have become a rarity. In Europe too, other than in London, there is also a distinct lack of enthusiasm for high rise structures. While Foster and Partners' long-awaited 298 metre Commerzbank in Frankfurt – a building commissioned before the property recession – will soon become the tallest building on the continent, towering over Helmut Jahn's 251 metre Messeturm as well as London's 242 metre Canary Wharf Tower, in Berlin, the German capital and Europe's biggest construction site, the authorities have ruled out office towers by means of strict, height-limiting development controls. By default the same thing appears to have happened in Paris, where Jean Nouvel's projected 417 metre Tour sans Fin is on indefinite hold. Even in London – everywhere other than among the erratic planning officers of the City, where a feverish enthusiasm reigns – attention has been directed elsewhere, chiefly at the phenomenon of unlet office buildings being converted into housing, which is more or less the opposite to building new high-rise office towers. The conversion of office buildings, which currently has value-added tax advantages, recently culminated in the announcement that a firm of developers will undertake the daunting task of converting the huge and unlettable office tower of the former Government Department of Social Security into a complex featuring 400 residential apartments.

Putting all these contra-indicators together makes it clear that, after 50 years of more or less continuous growth, the future of the commercial office as presently defined is at the very least in doubt. How then do the proponents of the London Millennium tower respond to the implied criticism? First they draw an immediate distinction between old and new office buildings. Then they point to the scarcity of quality office

space in the City. By quality space they mean American-style large floor plate, high slab-to-slab, open-planned rafts of serviced floorspace suitable for the galloping information technology and changing management needs of our era. Ironically this is precisely the kind of architecture that was discouraged by the conservationist mentality, tortuous medieval road network and diminutive sites offered by the City throughout the 1980s, and the results of their embargo are clearly visible today. There are streets of empty nineteenth century bank buildings at the heart of the financial centre of London, while office complexes based on American space standards – like Broadgate and Canary Wharf – are still in short supply and, as a result, have remained profitably let despite the literal bankruptcy of their owners during the recession. The proposed London Millennium Tower will be able to capitalise on this local shortage, say the supporters of the Foster project. It will always justify premium rents because it will combine a more central location than Canary Wharf with an unprecedented 70 floors of high-tech serviced floorspace in large 3,000 square metre increments aggregating to over 200,000 square metres, all in a single building.

It is for this reason, if and when the project goes ahead (for it faces considerable opposition, as well as numerous bureaucratic and technical hurdles), that it will thus mark a breakthrough. A reason predicated on the existence of an artificially constrained built environment in London. As a result of years of restricted development at the City's core, the Foster Tower will be able to offer half as much serviced floorspace in one building as the total complement of all the original Broadgate buildings offered ten years ago, and twice as much floorspace as London's largest modern office building, Cesar Pelli's Canary Wharf Tower. In short, it is a magnificent project, but only in the context of London, a city brought close to ruin by years of fanatical and destructive conservation. London's global competitors have not been so squeamish.

Martin Pawley

Events

LECTURES, CONGRESSES AND CONFERENCES

AUSTRIA

More Efficiency for the New Millennium A symposium over two days. Topics to be covered include: the status of the global steel market, the latest CAD tools, Total Quality Management and the acceptance of EUROCODE 3. 14-15 November 1996. Contact Ms Elke Böhm. Tel: +43 1 53 54 839. Fax: +43 1 53 54 838-8

CHINA

8th International Federation of Landscape Architects Eastern Regional Conference 11-14 December 1996. Hong Kong Convention and Exhibition Centre. Tel: +852 2528 6136. Fax: +852 2865 1528

UK

Daniel Libeskind The architect talks about his controversial scheme for the Victoria and Albert Museum extension, London. 3 December 1996, 6.30 pm. Architecture Centre, 66 Portland Place, London, W1, UK. Tel: +44 171 307 3699. Fax: +44 171 255 1541

USA

14th Urban Waterfronts Annual Conference Scheduled to coincide with the release of the book *The New Waterfront: A World-wide Urban Success Story*. The conference will focus on waterfront developments the world over. Running from 13-16 November 1996, the conference includes an all-day workshop and the announcement of the Annual Excellence on the Waterfront Award. Contact The Waterfront Center, 1622 Wisconsin Avenue, NW, Washington DC 20007, USA. Tel: +202 337 0356. Fax: +202 625 1654

USA

AISI Steel Home Seminars The last in a series of three hands-on training seminars on the use of light-gauge steel in home construction across the USA, takes place in Houston, USA. Running from 18-22 November 1996. Organised by the American Iron and Steel Institute. Tel +212 705 7658

YUGOSLAVIA

Architecture and Urbanism at the turn of the III millennium 13-15 November 1996. The conference will focus on the issues affecting the architectural profession at the end of the millennium; including socio-political upheavals and new technologies. Sava centar, Milentija Popovica 9, Belgrade, Yugoslavia. Contact: Ms Natalija Jurosevic. Tel: +381 11 3225254. Fax: +381 11 135919

ARCHITECTURE AND DESIGN COMPETITIONS

GREECE

The Cultural Capital of Europe, Thessaloniki 1997 A competition requiring European professionals in the fields of urbanism and architecture, under the age of 45, to design modern architectural and landscape projects to be inscribed within the existing cityscape of Thessaloniki. Registration until 21 February 1997. Contact EUROPAN/THESSALONIKI 1997, the Organisation for the Cultural Capital of Europe, 105 Vassississis Olgas av, 546 43 Thessaloniki, Greece. Tel: +30 93 268143. Fax: +30 31 86 7870

JAPAN

8th International Design Competition In quest of spiritual comfort and the relaxation of the

mind. Total prize money US\$71,000. Deadline for preliminary screening 2 December 1996. Preliminary screening 5-7 March 1997. Citation ceremony and exhibition October 1997. Contact Mr Fukunaga and Ms Sako, Japan Design Foundation, Osaka Eki-mae Dai-ichi Building 8F, 3-1-800 Umeda, Kitaku, Osaka 530, Japan. Tel: +81 6 346 2611. Fax: +81 6 346 2615

UK

The AIA London, UK Excellence in Design Awards The third annual AIA awards programme, which seeks to recognise and honour excellence in architectural design. Eligibility is restricted to European architects, and projects designed or built in Europe. All projects must have been designed after 1 January 1994. Jury includes Ian Ritchie, Pierre Baillargeon, Gabrielle Bramante, Nicholas Grimshaw and Michael Lischer. Submission deadline 15 November 1996. Awards Gala 3 December 1996. Address for submissions Michael Lischer AIA, Chapter President AIA London/ UK, Design Awards Program, Helmuth, Obata & Kassabaum, Kent House, 14-17 Market Place, London W1X 7AJ, UK. For further information contact Stephan C Reinke. Tel: +44 181 748 8088. Fax: +44 181 748 3475

St Pancras Chambers Competition Competition for the regeneration of the Chambers, a Grade 1 listed building, formerly the Midland Grand Hotel. Entries are invited from consortiums and companies with the vision and financial capacity to restore the Chambers and to realise its potential for long term use. Registration and pre-qualification submission deadline 11 November 1996. Contact Stephen Jordan, Managing Director, London

& Continental Stations & Property Ltd, 3-5 Rathbone Place, London, W1P 1DA, UK. Tel: +44 171 314 1000. Fax: +44 171 580 9082

USA

1996 Paris Prize in Public Architecture Proposal for a Temporary Building in Wall Street. Open to recent/prospective graduates of US architecture courses (1988-97). Jury includes Jacques Herzog and Toshiko Mori. Submission deadline January 1997. Results/Exhibition February 1997. Contact the Van Alen Institute, 30 West 22 Street. New York, NY 10010, USA. Tel: +202 924 7000. Fax: +202 366 5836. e-mail: vanalen@designsys.com. Internet: <http://www.vanalen.org>

EXHIBITIONS

BELGIUM

The Voyages of the Normandie and Baudouinville A celebration of the 1930s vogue for luxury liners as a means of transport and as a creative outlet for architects and designers. Until 1 December 1996. Contact the Fondation pour l'Architecture, Brussels, Belgium. Tel: +32 2 649 0259

Victor Horta An exhibition organised by the Fondation Europalia International, offering a detailed examination of the architect's work. Held in Horta's own Palais des Beaux-Arts, the exhibition closes on 5 January 1997. For information Tel: +32 2 507 8594. Fax: 32 2 513 5488

CANADA

Frank Lloyd Wright Designs for an American Landscape, 1922-1932 Until 22 November 1996. Contact CCA 1920 rue Baile, Montreal, Canada. Tel: +514 939 7000

DENMARK

Integrated Art At the Egebjerggård housing scheme, in suburban Copenhagen, under the auspices of "Copenhagen 96", a group of artists will create permanent works of art for squares and other public spaces in the area. Until 31 December 1996. Contact Copenhagen 96 Information Department, Amagervej 21, DK-1160 Copenhagen K, Denmark. Tel: +45 33 77 96 33. Fax: +45 33 77 96 01

FRANCE

New Architecture in Flanders Until 24 November 1996. Arc en Rêve, Centre d'Architecture, Entrepot, 7 Rue Ferrere, Bordeaux, France. Tel: +33 1 42 76 33 97

GERMANY

Design of the 50s, 60s, 70s and 80s A retrospective look at design over the last four decades, covered in four separate installations in four separate rooms. The exhibition will remain on view until 31 December 1996. Contact Ms K Takvorian. Vitra Design Museum, Charles-Eames-Strasse 1, Weil am Rhein, Germany. Tel: +49 7621 702200

HONG KONG

Cities of the Future: towards a new urban living Before handing over to China, an exhibition of new buildings by British architects working all over the world. The exhibition will take place at the Pacific Place Concourse, Queensway, Hong Kong and runs from 29 January - 1 February 1997. A half-day symposium will precede the opening of the exhibition. For full details contact David Blagbrough, British Council, UK. Tel: +44 171 389 4940. Fax: +44 171 389 4058. e-mail: david.blagbrough@brit-coun.org

ITALY

6th International Architecture Biennale Held at Castello Gardens, Venice until 17 November 1996. The main exhibition "Sensing the future - The Architect as Seismograph" (curator, Hans Hollein) is being held in the Italian Pavilion. For information contact La Biennale di Venezia. Tel: +39 41 5218711. Fax: +39 41 5200569.

THE NETHERLANDS

The Netherlands Goes to School Two centuries of school construction. 7 December 1996 - February 1997. Netherlands Architecture Institute (NAI), Museumpark 25, 3015 CB Rotterdam, The Netherlands. Tel: +31 10 440 12 00. Fax: +31 10 436 69 75

UK

Living Bridges A proposal for a new habitable bridge for the River Thames, London forms the centre piece of the exhibition which illustrates the contribution that inhabited bridges have made to the development of the urban landscape. Until 18 December 1996. Royal Academy of Arts, Piccadilly, London, UK. Tel: +44 171 494 5615. Fax: +44 171 439 4998

Charles Reilly and the Liverpool School of Architecture 1904-33 Until 2 February 1997. Under the professorship of Charles Reilly (1875-1948) the Liverpool School of Architecture became internationally renowned. This exhibition profiles his work and the work of the pupils that studied under him. Walker Art Gallery, William Brown Street, Liverpool, UK. Tel: +44 151 478 4614

The Architect of Floors First retrospective of the American born

modernist designer Marion Dorn (1896-1964), whose relocation to the UK, in 1923, helped shape British attitudes towards design. Until 21 December 1996. RIBA Heinz Gallery, 21 Portman Square, London W1, UK. Tel: +44 171 307 3641

USA

Building for Air Travel: Architecture and Design for Commercial Aviation Until 7 January 1997. The Art Institute of Chicago, 111 South Michigan Avenue, Chicago, Illinois 60603-6110, USA. Tel: +312 443 3600. Fax: +312 443 0849

Between Fences An exhibition examining the role of fences in defining the American landscape and culture. Until 5 January 1996. Contact: Public Affairs, National Building Museum, 401 F Street NW, Washington DC. Tel: +202 272 3606. Fax: +202 272 2448

Humane Technology: The Eames Studio and Beyond Until January 1997. Museum of Modern Art 151 Third Street. Tel: +415 357 4000

Three Buildings by Frank Lloyd Wright American spirit alive in Japan. Until 19 January 1997. National Building Museum 401 F Street NW, Washington DC, USA. Tel: +202 272 2448

An American Embassy in Berlin An exhibition examining the recent competition for a new American Embassy in Berlin. The exhibition will focus on the winning entry by Moore Ruble Yudell and Gruen Associates. From 15 November 1996 to 23 February 1997. Contact Elly Muller or Lisa Eddy at the National Building Museum, 410 F Street NW, Washington DC 20001, USA. Tel: +202 272 3606 or 272 2448. Fax: +202 272 2564

TRADE SHOWS

AUSTRALIA

AUSBEX

Sydney Convention and Exhibition Centre, Darling Harbour, Sydney, Australia. 24-27 November 1996. English speaking platform to access South East Asia. Contact Tony Doran. Tel: +61 3 9245 7373

CHINA

CHINABEX

Fourth international building/construction exposition. 3-6 December 1996. Shanghai International Exhibition Centre, Shanghai, China. Contact Catherine Leong. Tel: +852 28240 330

FRANCE

Batinov 96

International building and renovation exhibition. 19-22 November 1996. Euroexpo, Lyon, France. Contact David Aitken. Tel: +44 181 910 7744

GERMANY

DOMOTEX 97

World trade fair for carpets and floorings. 11-14 January 1997. Hannover, Germany. For further information contact Tel: +44 181 688 9541. Fax: +44 181 681 0069. Local contact Deutsche Messe AG. Tel: +49 511 890

POLAND

BUDMA 97 Building and construction exhibition. 21-24 January 1997. Contact John Cash, JC Exhibitions. Tel: +44 1223 233 952. Fax: +44 1223 234 537

VIETNAM

Construction and Building Vietnam 96 Third Vietnam international exhibition on construction/building. 26-30 November 1996. Contact Celine To Adsale Exhibition Services, Hong Kong. Tel: 852 2811 8897. Fax: +852 2516 5024



Malaysia

Malaysia is experiencing a major construction boom, as a result of nine continuous years of high economic growth. The built results are most obviously visible in the capital, Kuala Lumpur, with the Prime Minister's plans for a new Multimedia Super Corridor to turn the country into the information hub of South East Asia. Within the MSC is the new giant international airport, the Kuala Lumpur City Centre project, incorporating the famous Pelli Twin Towers, and plans for the new administrative capital, Putrajaya. During the next Governmental "Five Year Plan" of 1996-2000 economic growth is predicted to be a healthy eight percent per annum. Robert Powell looks in from Singapore, and Nicola Turner talks to Battle McCarthy, UK-based environmental engineers, on the opportunities for "foreigners" in Malaysia.



The Multimedia Super Corridor

On 1 August 1996 Malaysian Prime Minister Datuk Seri Dr Mahathir Mohamad unveiled plans for a new Multimedia Super Corridor (MSC) aimed at turning the country into the information hub of South East Asia. Running south from Kuala Lumpur's commercial centre the 50 kilometres long by 15 kilometres wide corridor will encompass the new federal administrative capital of Putrajaya and the new Kuala Lumpur International Airport (KLIA) at present under construction at Sepang.

More than 100 large Japanese firms including the giant Nippon Telegraph and Telephone Corporation have confirmed their participation in the project and Microsoft Corporation of the USA came on board on 3 August 1996.

The government has already committed RM48 billion (US\$18.45 billion) for the physical infrastructure of the corridor. The entire area is to be serviced by a "2.5-10 gigabites, 100 percent digital fibre-optic network".

The Multimedia Super Corridor project indicates a shift in the Malaysian economy towards information technology. The development of the IT sector is being given priority in the national strategy to achieve "developed-nation" status by the year 2020.

Putrajaya

At the heart of the MSC is the new Federal Administrative Capital City of Putrajaya. The relocation of 76,000 Government employees to the new capital is scheduled for 1998, and it is hoped that it will alleviate some of the chronic congestion in Kuala Lumpur. Construction of the RM20billion (US\$7.5 billion) project is now underway. Located in Selangor, halfway between Kuala Lumpur and Seremban it will be easily accessible from the new airport. The overall structure plan for the new city encompasses an area of 14,780 hectares of which 4,400 hectares will be assigned to the core functions of administration, business and cultural facilities.

The core is eight kilometres long by two kilometres wide running north-south and incorporates an artificial lake.

In December 1993, the Federal Government of Malaysia appointed local consultants and government departments to submit masterplan proposals. Of the five projects submitted, the Garden City Concept designed by BEP Akitek Sdn Bhd was selected by the Prime Minister's Department. The lead designer for the competition entry was Kun Lim, a 36 year old architecture graduate of the University of Houston.

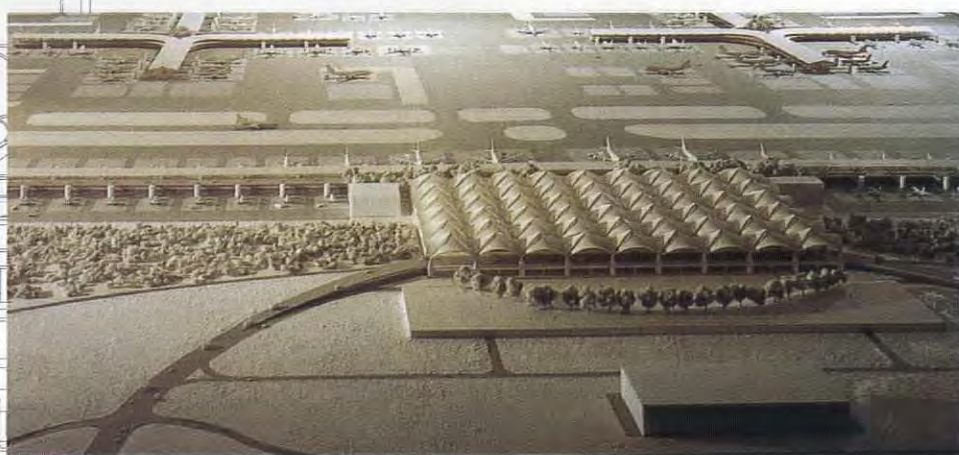
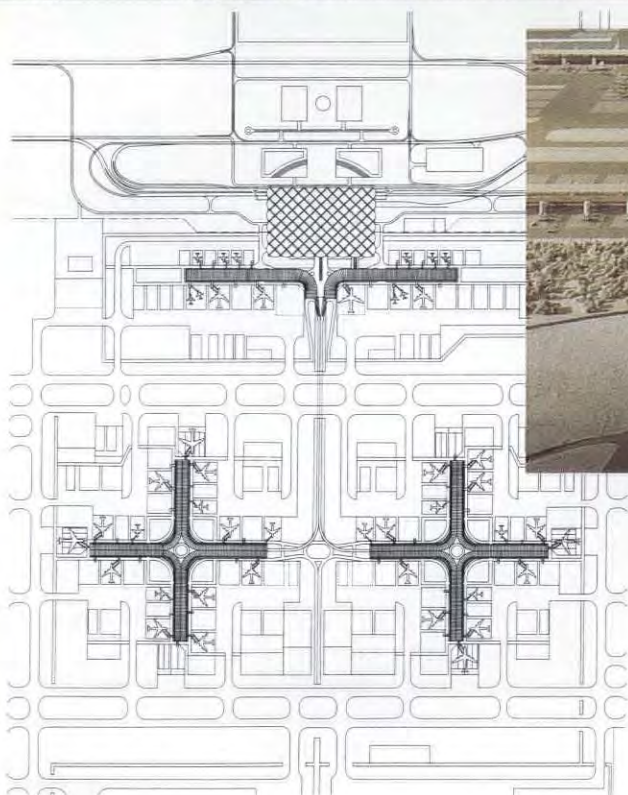
In early 1994, Kumpulan Perunding Kota Bistari Sdn Bhd, a multi-disciplinary consortium of local consultants, was formed who together with the Town and Country Planning Department, the Public Works Department and other Government departments were initially given the task of implementing Putrajaya.

But in late 1995 the government, mindful of the urgency to complete the showcase new federal administrative capital by the year 2005,



Previous page The first phase of the Kuala Lumpur City Centre development, at the northern end of the Multimedia Super Corridor, focuses on Cesar Pelli's Petronas Towers in Kuala Lumpur, due for completion in 1997. The towers are currently the tallest building(s) in the world.

Left Masterplan model of the new Federal Administrative Capital, Putrajaya, prepared by Kumpulan Perunding Kota Bistari Sdn Bhd. Relocation of 76,000 Government employees to the new capital is scheduled for 1998



Left and above The new international airport 15 kilometres south of Putrajaya dwarfs the Petronas Towers in scale. Designed by Kisho Kurokawa Associates in association with Akitek Juruancang (Malaysia) Sdn Bhd, the airport covers 10,000 hectares and will ultimately cater for 90 million passengers a year. Phase 1 is due for completion by early 1998

replaced this rather cumbersome apparatus for plan implementation. Putrajaya Corp chaired by Tan Sri Azizan Abidin is now charged with the task of building the city and later running its affairs. It has the regulatory authority of City Hall and the development powers of a State Economic Development Corporation.

Putrajaya Holdings, chaired by prominent stockbroker Tan Sri Rashid Hussein, is the exclusive developer. It is a private company owned by Government agencies and has the options of developing on its own, entering into joint venture with other parties or parcelling out land for development to private companies. KLCC Bhd, the project managers of Kuala Lumpur City Centre, which includes the

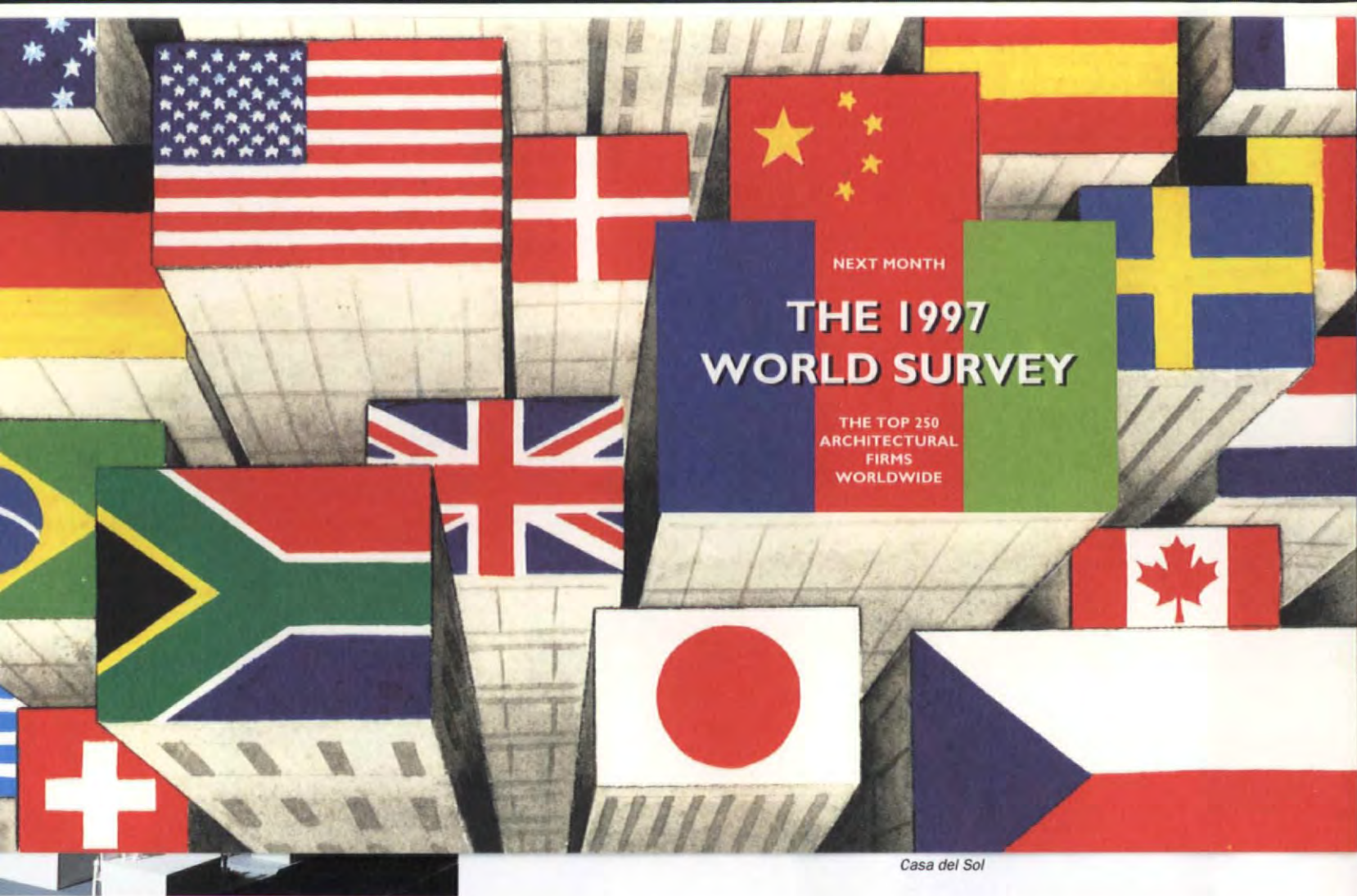
Petronas Twin Towers, were brought on board as project managers in order to tap the expertise they had acquired in managing this mammoth project in the capital.

One of the first buildings to appear on site will be the Prime Minister's Department Complex which forms part of Phase A. Construction work for this phase, which includes support infrastructure as well as residential accommodation, started in August this year.

Kuala Lumpur International Airport (KLIA)

Fifteen kilometres south of Putrajaya the new international airport is beginning to take shape. Designed by Kisho Kurokawa Associates of Japan in association with Akitek Juru-

rancang (Malaysia) Sdn Bhd the area encompassed by the airport is 10,000 hectares. Road access to the airport is by a link to the North-South Expressway Central Link (NSECL) via a new interchange north of Nilai. The total expenditure by the Government and private sector for the first phase of the KLIA is RM13 billion (US\$4.9 billion). This phase will cater for 25 million passengers per annum and comprises a main terminal building, two parallel four-kilometre-long runways and numerous other facilities. The master plan, which dwarfs the massive Petronas Towers in scale, eventually envisages a capacity of 90 million passengers per annum. The current challenge is to complete Phase 1 by early 1998.



Kuala Lumpur City Centre (KLCC)

The northern focus of the Multimedia Super Corridor is Kuala Lumpur City Centre. On the back of nine continuous years of high economic growth Malaysia is experiencing a major construction boom. The capital is the focus of much of this activity. The 40 hectare Kuala Lumpur City Centre (KLCC) project on the former site of the Selangor Turf Club came on line this year. The first phase is the Petronas Twin Towers designed by the Argentinian-born USA architect Cesar Pelli which will be completed in early 1997. At 450 metres it will be the world's tallest building, seven metres higher than Chicago's Sears Tower. Its 88 storeys each has a plan form of an eight pointed Islamic star and it comes with a price tag of US\$787.5 million. The Petronas project will generate a huge 385,000 square metres of new office space which, along with ten other office projects which have come on line during 1996, means there will be some 635,000 square metres of new office space for letting in the capital alone, and another 328,000 square metres projected for 1997.

Kuala Lumpur Linear City (KLLC)

Hard on the heels of the Kuala Lumpur City Centre (KLCC) project comes the Kuala Lumpur Linear City (KLLC). This RM\$10 billion (US\$3.72 billion) mini-city covering an area of 117 hectares is planned to be built over the Klang River supported on arches spanning

the width of the waterway.

Eight parcels of land along a 12 kilometre corridor will accommodate offices, restaurants, hotels, apartments and entertainment centres. It will also include a People Mover Rapid Transit (PRT). The project is being developed by KLLC Sdn Bhd who are using their own in-house architectural team, Original Scope, and the first phase is planned to go on site this month – November 1996, with Giga World – a huge mixed-use, but primarily leisure, development. The KLLC project has an interesting history and it has involved at one time or another Peter Cook, Ron Herron, David Gosling, Santiago Calatrava, Ove Arup and Anthony Hunt as consultants.

Infrastructure in Kuala Lumpur

Kuala Lumpur is currently experiencing chronic traffic congestion. To remedy this situation massive investment is being channelled into infrastructure. The bulk of Kuala Lumpur's integrated transportation system should be fully operational by 1998, in time for the prestigious Commonwealth Games. The Commonwealth Games Village is under construction at Bukit Jalil.

The new public transit network will profoundly alter the accessibility pattern of the existing urban structure.

In addition to the reorganisation of all existing bus companies into two consortiums the major components of the integrated system are:

- The Light Rapid Transit System (LRT), a metropolitan commuter train service which connects the city centre with the densely populated suburbs. Phase 1 of the LRT covers a distance of 12 kilometres from Ampang to Sentul with 13 stations, and south from Loke Yew to Bukit Jalil with seven stations. It comes into service in 1996. LRT Phase 2, a 30-kilometre route serving Gombak and Petaling Jaya crossing the city centre, will have 24 stations.
- The KTM Komutor, a double track commuter train system covering 153 kilometres from Rawang to Seremban via Kuala Lumpur and from Sentul to Port Klang. It is already operational.
- The People-Mover Rapid Transit System (PRT) comprising 16 kilometres of elevated rail service in the downtown area of Kuala Lumpur.
- The Express Rail Link (ERL), a train service which will connect Kuala Lumpur Central Station with the new Putrajaya Administrative Centre and the new Kuala Lumpur International Airport.

Johor Waterfront City

In the southern state of Johor a major new RM6 billion (US\$2.25 billion) project is commencing across the causeway from Singapore. The Johor Bahru Waterfront City (JBWC) project is to be built along the shoreline of the Straits of Johor. By the year 2012 it is planned

that there will be 41 blocks of commercial, hotel and residential development on a 47 hectare platform placed over piles which have been driven into the sea bed.

The first of the parcels of land to the west of the existing causeway will be Johor Bahru's new Central Business District with 76 hectares of land developed to yield 836,000 square metres of commercial and retail floor space. On later parcels there will be 156,000 residential units.

The JBWC project was launched by Prime Minister Dr Mahathir on 5 July 1996. Dr Mahathir sprang a surprise at the launch announcing, apparently without prior consultation with neighbouring Singapore, that the Malaysian Government plans to replace the causeway linking the two countries with a new bridge. The 1.2 kilometre-long causeway is currently the only road link with Singapore. Built 74 years ago it is the scene of frequent traffic delays.

A Second Link

The Malaysian and Singapore governments are currently collaborating on a second link, the 2.3 kilometre-long bridge joining Tuas in Singapore to Gelang Putah in Johor. The bridge is on schedule and is expected to come into operation in November 1997. With a capacity of 200,000 vehicles per day it is expected to clear travellers five times faster than the existing causeway.

The bridge will accelerate growth in southern Johor. A new "mega township" named Nusajaya is planned. The new township encompasses 10,860 hectares and is to be developed in five phases over a period of 25 years. It will have an eventual population of 500,000 served by three interchanges on the expressway.

Also coming up 18 kilometres from Johor Bahru in Pasir Gudong is a huge theme park to be built in the Seri Alam township by Agarta Universe of Italy. The Italian company have taken out a 99 year lease at a cost of RM60 million (US\$23.1 million). The first phase of the theme park will cost RM900 million (US\$345 million) and aims to attract six million tourists during its first year of operation according to Agarta's CEO Datuk Rinaldo Romani. The theme park is scheduled to open in late 1998 and will be the largest in the region. Subsequent phases will include the construction of hotels to provide 12,000 rooms with additional investment of RM2 billion (US\$750 million).

Overseas interest – Battle McCarthy

UK-based environmental engineers, Guy Battle and Chris McCarthy started their careers with Ove Arup and Partners, but subsequently set up their own office, Battle McCarthy, in a bid to work more closely with the indigenous engineers abroad. "We found we were too threatening to others when we were working under the umbrella of Arups." The Malaysians appreciate their working method because "many of the architects have been educated in the UK, and they appreciate the role of the engineer and the architect".

"Our break came with Ken Yeang, who had been reminded by Peter Cook of the importance of environmental engineering. He lined up talks at PAM [the Malaysian Institute of Architecture] and meetings with other architects. The Malaysian architects want UK engineers. At the moment there is no learning curve for them. They are designing and building at the same time...we can provide international expertise with local knowledge."

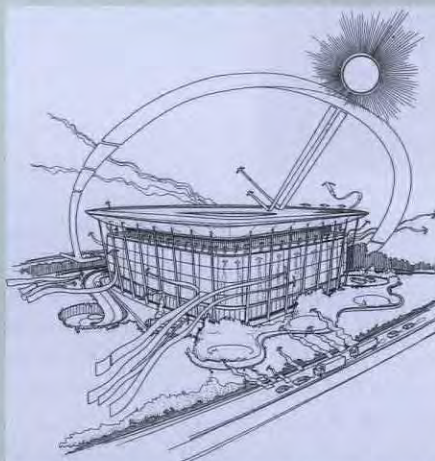
Battle McCarthy have a great deal of respect for the Malaysian architects. The personal investment demanded of them means that they "have got to be gamblers...there is no money until the thing's built...so the architect has to have his own money in the first place...everyone's an investor. If the architect goes in, the engineer follows...the architects have to be more courageous, they don't have rows of other people protecting them...they're on the battle field and they can get shot...but still they get their teams to work...they are only allowed to make a mistake once...when you're out there you've got to wear the trousers – you've got to grow up...you have to be all things; a lawyer, accountant, engineer, entertainer..."

Much of Battle McCarthy's work now is with the giant firm of Hijias Kasturi, influential

architects well known for their Government-funded projects, including the proposed New Securities Industries Development Centre + Securities Commission Headquarters Building (SIDC-SC) in Kuala Lumpur. Battle McCarthy are ensuring that this is Malaysia's first truly intelligent and environmentally responsive building.

One of the reasons overseas architects and engineers are accepted more readily in Malaysia, is that everyone's in the same boat: "Foreigners are not so foreign in Malaysia,

because to a certain extent they all are, with Chinese, Indians, Indonesians etcetera" The British in particular have an easier ride, since with its colonial history Malaysia adheres to all the British standards of construction. "Everyone's going up together..." British contractors are out there too, as are many other UK investors. Battle McCarthy think that the trend will soon

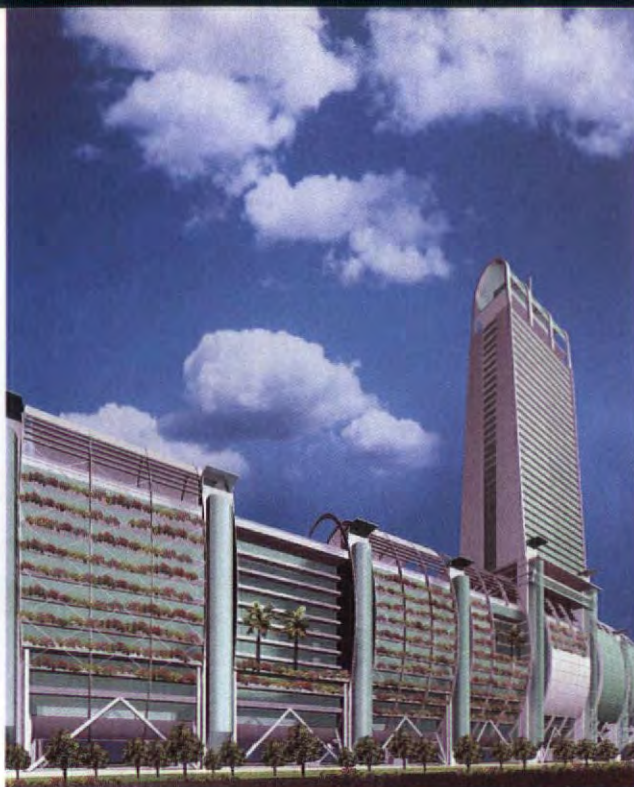


Battle McCarthy's design objectives for the new SIDC-SC Headquarters at Bukit Kiara by Hijias Kasturi, showing maximum use of free energies and renewable materials

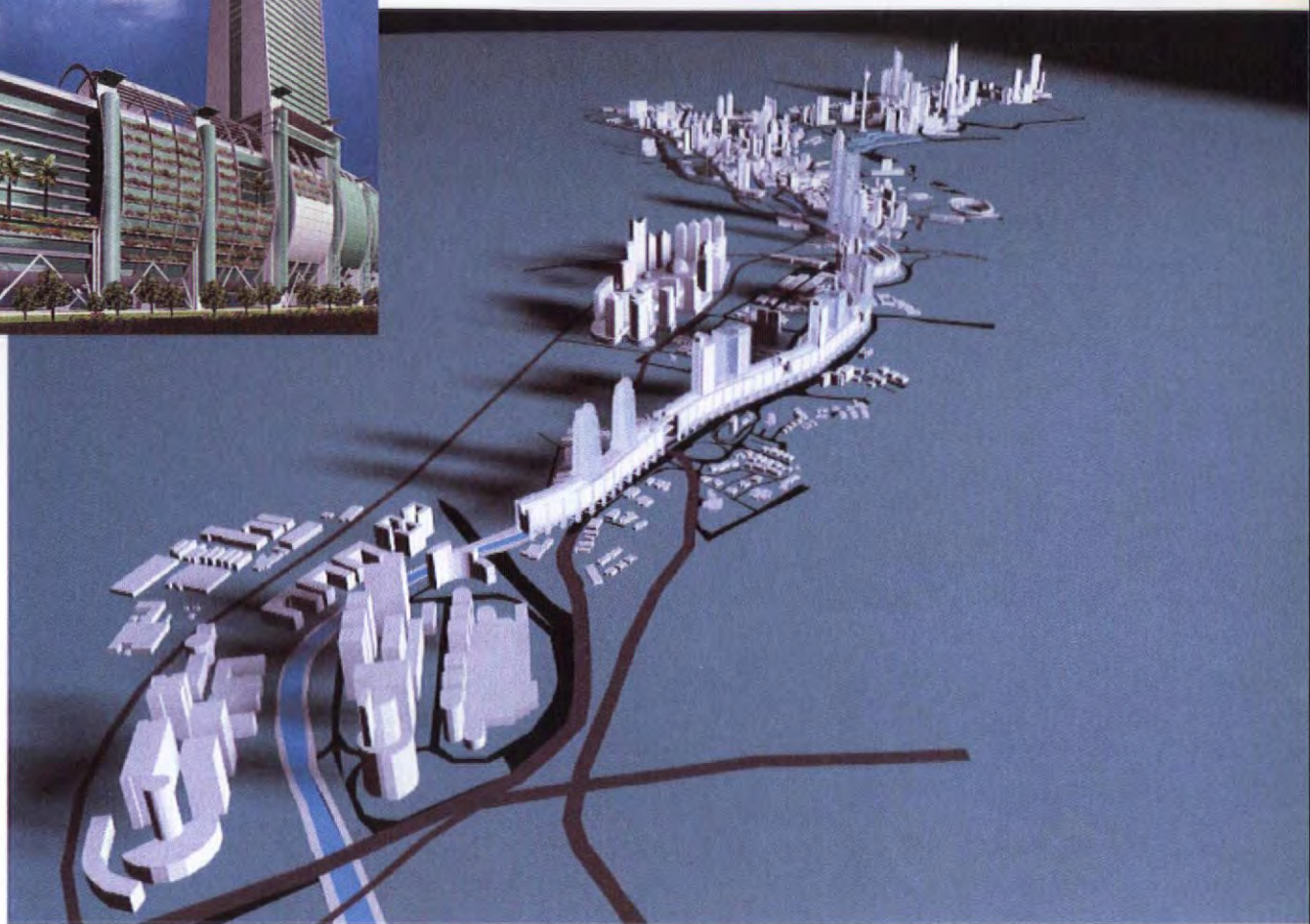
be reversed, and Malaysians will start to invest in the UK. "They are already buying into UK construction companies."

When asked about the future for architecture in Malaysia, McCarthy agrees that "KL might be burnt out after 1998", (and the Commonwealth Games) but believes that "people will still come out and set up in the surrounding regions. They'll be more social projects, improving local standards [of living and working]. There'll be more use of local teams".

Will Battle McCarthy continue to work in South East Asia whatever the outcome? "Malaysia is our foothold into Bangkok and China...but there is enough work around for us only to concentrate on Malaysia...but it wouldn't work with the cashflow!" Their business is market led. They will go wherever there are projects big enough to sustain the expense of specialist expertise. "The Philippines will probably be the next big market."



Left Computer generated image of Giga World, the first phase of Kuala Lumpur Linear City, due to go on site this month. Giga World, a huge mixed-use development, primarily focuses on entertainment. **Below** Image of the completed KLLC mini-city, which will cover 117 hectares at a cost of RM10 billion (US\$3.72 billion)



Into the 21st Century

The Seventh Malaysia Plan which charts the country's economic strategy from 1996 to 2000 anticipates economic growth to be eight percent per annum during this five year period.

A total allocation of RM162.5 billion (US\$62.4 billion) is made in the plan for development. This constitutes 11.5 percent of the GNP compared with 14.8 percent in the Sixth Plan and reflects the government's determination to reduce the size and role of the public sector.

The country's economy which used to be commodity based in the 1980s, is now more diversified with manufacturing playing a key role. Manufacturing is expected to grow at 16.9 percent per annum in the next five years and to account for 37.5 percent of the GDP in 2000, up from 33.1 percent in 1995.

Low-Cost Housing

While Malaysia is successfully progressing towards "developed country" status some of its

citizens are marginalised. There are visible signs of areas of squatter housing around the capital. The government aims to continue to eradicate poverty. It wants to bring down the incidence of poverty to six percent by 2000, from 9.6 percent of the population in 1995. Although accurate statistics are not available Deputy Minister in the Prime Minister's Department Datuk Ibrahim Saad estimates that the number of squatters in the Kepong and Jinjang areas of the capital is around 230,000. The estimate is probably on the low side. The government aims to build some 63,000 low-cost houses in Kuala Lumpur alone, but major new solutions are required for low-cost housing.

Matters of concern to architects

One consequence of the current boom in building activity is the shortage of architects. In response to this problem a significant number of young Malaysian architects are returning from abroad and practices such as GDP (whose new headquarters building for the car giant Proton is

profiled in this issue) and Design Matrix the practice of Heng Jee Seng who worked with Michael Hopkins for ten years, are making an impact. Others include Architron Design Consultants, ZLG Design and DNA Consultants.

Professor Parid Wardi Sudin, Dean of the Faculty of Built Environment at the Universiti Teknologi Malaysia (UTM) in Johor, is slightly wary of the influx of foreign design consultants into Malaysia attracted by the building boom. "How can we get the best out of them," he says, inferring that not all projects designed by these architects are acceptable. This is a point echoed by Datuk Hj Esa who notes that in assessing any solution one should ask, "Is it appropriate? Is it sensitive to promoting local industries and local talent?"

Ken Yeang points to the need for advanced building techniques to enable rapid construction. This will help to overcome other consequences of the boom such as shortage of skilled building site labour and some materials such as cement.

WA

Making the face fit

Peter Verity, London-based director of the international architectural design and planning group, NFA, keeps his office in Europe despite the fact that all his work is in South East Asia – most particularly, Malaysia. In a thriving economy in which clients' briefs to their architects are increasingly demanding, NFA recognises the benefits of flying in and out of Kuala Lumpur, while maintaining a quality team of designers at home. Graham Vickers met up with him while he touched base at home. Portrait by Chris Floyd.



The London-based office of NFA continues to develop its presence in Malaysia where, according to director Peter Verity, it is seeking to promote a rather cerebral brand of architecture, urban design and planning. A few years ago such an approach might have seemed out of place in a country whose urban inventions sometimes appeared to have all the thoughtfulness of a frontier town that needed to be constructed before nightfall. However – and as usual in South East Asia – things are changing. Verity explains that the recent collective experience of NFA's principals – all of whom began working individually in South East Asia during the 1980s – has revealed a significant shift away from the former dominance of Hong Kong and other discrete hubs of activity.

"Now increasingly we find that we're working in one country because we've been working in another one for a related group" he says. In his own firm's case a presence in Thailand derived from an introduction in Hong Kong. This in turn generated work in Vietnam, Burma and – in some tenuous elision having to do with governmental policy in Rangoon – yet more work, this time in Singapore. Understanding how this process works, Verity maintains, is essential to "making your face fit" in the region. This is a favourite phrase of his which implies a subtle mélange of political skills, cultural sensitivity and professional agility otherwise summed up as "getting on with people of other cultures".

"When I first went to Malaysia in 1981 it was less sophisticated in character" he recalls. "Today it's a society that is moving very rapidly. Malaysians are far better educated, far more exposed to other cultures – and they're increasingly moneyed. They are now able to enjoy the best of the world in their own country, and as a result they're very demanding".

NFA's 1989 strategy for Plaza Central, Jalan Pudu in Kuala Lumpur, offered a pragmatic reconciliation of existing urban problems whilst consolidating various land titles. By 1993 the practice was working on a design for the Kuala Lumpur City Centre project, a not yet built 246,000 square metre collection of office, apartment and hotel buildings at the foot of the Kuala Lumpur Communications Tower. These projects played their part in introducing NFA to a modern Malaysia that has demonstrated increasingly sophisticated architectural ambitions.

"We are now approached rather than having to make ourselves known" Verity says. "Last year a major Malaysian investor asked us to develop a new city in China. That was enormously exciting in that it involved finding out what the Chinese community wanted as opposed to what the Malaysian investor wanted to give them. That in itself produced a peculiar dynamism".

Meanwhile, architectural project joint ventures remain a necessary part of working in Malaysia, where foreign firms are not permitted

whom will have come from rural backgrounds living within strong family communities".

As an exercise in social engineering, Sarawak sounds like an ambitious project, combining computer-based individual learning programmes with social integration (but residential sexual separation), maximising research and development potential through planning whilst presenting an introductory urban model for Malaysia's rural youth whose future will inevitably lie in the cities of Asia.

In a sense this Asian re-interpretation of

"A local architect wanting to form a project joint venture will often look to the society that he knows most about ... probably where he was educated. For this reason the loyalty factor to Britain is changing... and for that we have Mrs Thatcher to thank for a very short-sighted educational policy".

to offer architecture as a product.

"If we work in Malaysia it is in association with locally-based firms of architects" says Verity. "And a local architect wanting to form a project joint venture will often look to the society that he knows most about – which will probably be where he was educated. For this reason the loyalty factor to Britain is changing... and for that we have Mrs Thatcher to thank for a very short-sighted educational policy".

Compared to NFA's workload in Hong Kong and Thailand, the firm's involvement in Malaysia is relatively small. However one project, the development plan for the University of Malaysia, Sarawak, typifies the kind of qualities that distance can lend and a thoughtful foreign firm can bring to Malaysia.

"It has been an enormously exciting project" Verity says. "The Malaysian Government and the vice chancellor of the university want to see it as a centre for excellence in Asia. We are creating an urban setting for students, many of

Europe's Louvain La Neuve university was a dream project for NFA, since it demanded not only architectural expertise but, more importantly, a talent for asking the right questions. In the circumstances leading to the firm's appointment you can find in a nutshell what thoughtful foreign architects can bring to Malaysia's fast-track urban design energies.

"Sarawak was run on the basis of a design-oriented competition" Verity says. "A notional brief was put out. There was a mark on a map. Now, we couldn't respond to a 2,000 acre site we couldn't see – it was covered with dense primary jungle – and at the time we had limited access to the academic thinking of the university. So at the interview, when the other seven entrants took along models and visual displays, we didn't bring a model. Instead we simply talked about the methodology. We said that we were not the architects, we were the hand that held the pencil. The vice chancellor and other academics would be the ones to push the hand that held the pencil".

WA

Building in Malaysia

GENERAL INFORMATION

The Land: Malaysia has a total area of 329,750 square kilometres. There are two distinct regions – peninsular Malaysia, and the Sarawak and Sabah region on the island of Borneo. Peninsula Malaysia occupies the southern half of the Malay Peninsula. It is bordered to the north by Thailand, to the west by the Strait of Malacca, to the east by the South China Sea, and to the south by Singapore. Peninsula Malaysia is characterised by a central mountain range of tropical rain forest, running north to south down the peninsula, and coastal plains on either side.

The Sarawak and Sabah regions on Borneo are east of the Malay Peninsula. They are bordered to the north by Brunei and the South China Sea, to the south and east by Indonesia, and to the west by the South China Sea. The area is characterised by broad, swampy coastal plains that become jungle covered hills and mountains in the interior.

Climate: Malaysia has a tropical climate influenced by the monsoon winds that blow south-west from April to October, and north-east from October to February. Temperatures are essentially uniform throughout the year.

Population: 19.7 million, urban (43%), rural (57%). More than 80% of the population live in Peninsula Malaysia.

Language: Bahasa Malay is the official language. Chinese and Tamil are also spoken. Since Malaysia is a former British colony, English is widely spoken.

Ethnic Composition: Malays and indigenous tribes (59%), Chinese (32%), Indian (9%).

Religion: Islam (53%), Buddhism (17%), the Chinese religions of Confucianism and Taoism (11%), Hinduism (7%), and Christianity (7%). Islam is the official religion.

Capital: Kuala Lumpur

TRAVEL & BUSINESS INFORMATION

Time Difference: Malaysia is 8 hours ahead of Greenwich Mean Time (GMT) and 13 hours ahead of Eastern Standard Time (EST).

Currency: Ringgit Malaysia, which divides into 100 sen.

Business Hours: Most businesses and government offices observe the following work week:

Monday - Thursday	8:00 - 12:45 and 2:00 - 4:15
Friday	8:00 - 12:45 and 2:45 - 4:15
Saturday	8:00 - 12:45

In the Kelantan, Terengganu, Johore, Perlis and Kedah States the hours are:

Saturday - Wednesday	8:00 - 12:45 and 2:00 - 4:15
Thursday	8:00 - 12:45

Airport Information: The major international airport is Subang, located in Kuala Lumpur.

Visa Requirements: Visas are not required for purposes of business and tourism, for stays of less than 3 months.

Dialling Code: The international dialling-in code for Malaysia is 60. The dialling-out code is 007.

GENERAL CONSTRUCTION INFORMATION

Construction Outlook: The construction market is active and very competitive. Infrastructure development remains a priority.

Inflation: The projected annual rate of inflation for the building industry is about 11% for 1996. A similar rate of inflation is expected for 1997.

Economic data

Consumer Price Index: 1990=100

1991	1992	1993	1994	1995
104.4	109.3	113.2	117.1	121.2

Exchange Rates: Ringgit per US \$

1991	1992	1993	1994	1995	1996 (Aug)
2.72	2.61	2.70	2.56	2.54	2.49

Forms of Contract: The forms of contract most commonly used in private building projects are those issued under the sanction of the Pertubuhan Akitek Malaysia (PAM) and the Malaysian Institute of Surveyors (MIS). They are generally referred to as the PAM forms of contract. The Institute of Engineers Malaysia also has a standard form of contract that is commonly used in the private sector. Government contracts, administered by the Public Works Department (PWD), mainly use the standard form of government contract issued by the PWD.

The standard forms of contract for both private and public sector projects have versions that include Bills of Quantities (BQs). For quantity surveying services, a standard form called "Memorandum of Agreement" is available from the Board of Quantity Surveyors Malaysia.

Procurement of Construction: There is a legal requirement for owners to have separate contracts with the architect and the engineers. Generally, design is greater than 50% complete when a project is tendered. The architect typically manages and administers construction contracts and is responsible for coordinating construction on smaller projects. For large projects, the owner may appoint an independent project manager.

Most construction contracts are traditional single or two stage tender on either a fully specified Bill of Quantities basis or on a drawings and specifications basis. Where projects are tendered on a drawings and specifications basis, a quantity surveyor is often asked to prepare the tender document, which will include a schedule of rates. Lump sum contracts will use a fluctuation clause. Fluctuation clauses allow for changes in material costs, not labour costs. Large contracts tend to be negotiated design/build contracts. Construction management is not a favoured contractual arrangement.

Design Professions: Most of the local architects and engineers are educated or trained overseas, principally from Britain, Australia or the United States. They are capable of handling almost any project. However, project sizes are increasing and becoming too large for local consultants to manage. Local consultants are turning to foreign companies for technology transfer and advice. Foreign design firms seeking work in Malaysia will need to associate with local practices.

Contractors: General contractors perform most work and subcontract speciality trades. Japanese and Korean contractors are increasingly involved in major construction projects.

Governing Codes and Standards: Government projects use a standard specification published by the Public Works Department, based on British codes and available in English. There is a growing use of specifications based on Japanese codes.

CONSTRUCTION MATERIALS AND METHODS

Material Availability: Most building materials are readily available, except those unsuitable for use locally due to climatic conditions.

Labour Availability: Labour costs are low, as are skill levels. Skilled labour costs are rising, and general contractors are experiencing a shortage of suitable workers. Unskilled labour is readily available. The majority of workers are from Indonesia, Thailand and Bangladesh.

Equipment Availability: Rental construction equipment and plant are readily available.

CONSTRUCTION COST GUIDES (1996)

Pricing Manuals: The Building Cost Information Centre was developed by a group of quantity surveyors to fill the need for published building cost information about the local industry. Contact the Malaysian Institute of Surveyors for information.

Approximate Construction Costs: The following square metre unit rates are provided for rough comparison purposes. All costs are in Ringgit Malaysia (RM). The costs exclude infrastructure costs and professional fees, but include the cost of preliminaries.

	RM/square metre
Office building, A/C,	
Shell & core/Tenant fit-out	800-1,000
Hotel, mid-rise, three star	1,500-1,650
Apartment, average quality	750-900
Industrial building	750-900

Regional Cost Variations: Construction costs in Johor, the southern state of Malaysia

neighbouring with Singapore, are perhaps five to 10% higher than Kuala Lumpur prices. Construction costs in the northern states are perhaps 3 to 5% lower than Kuala Lumpur.

USEFUL ADDRESSES

Persatuan Akitek Malaysia (PAM)
4 & 6 Jalan Tangsi
PO Box 10855, 50726 Kuala Lumpur
Phone: +60 3 298 4136/292 8733
Fax: +60 3 292 8782

Malaysian Institute of Surveyors (MIS)
Penthouse Bangunan Jurukur,
Lot G4, G6 Jalan 52/4
PO Box 171, 46720 Petaling Jaya
Phone: +60 3 756 9728
Fax: +60 3 755 0253

Institute of Engineers Malaysia
Bangunan Ingenieur
Lot 60 & 62 Jalan 52/4
PO Box 223, Jalan Sultan
46720 Petaling Jaya
Phone: +60 3 756 9173/756 9575
Fax: +60 3 757 7678

The Association of Consulting Engineers Malaysia
63 & 65-2 Medan Setia 1
Damansara Heights
50490 Kuala Lumpur
Phone: +60 3 255 0031/255 0079/255 0158
Fax: +60 3 255 3499

Malaysia Builder's Association
13 C Jalan Ejeuja (3rd Floor)
50100 Kuala Lumpur
Phone: +60 3 232 1636
Fax: +60 3 238 3228

Standards and Industrial Research Institute (SIRIM)
Periaran Datoí Menteri
Section 2
Peti Surat 7035, 40911 Shah Alam
Phone: +60 3 559 2601
Fax: +60 3 550 8095

World Architecture and Hanscomb wish to thank TZR Runding & Associates in Malaysia for assisting in the presentation of the information in this Country Focus.

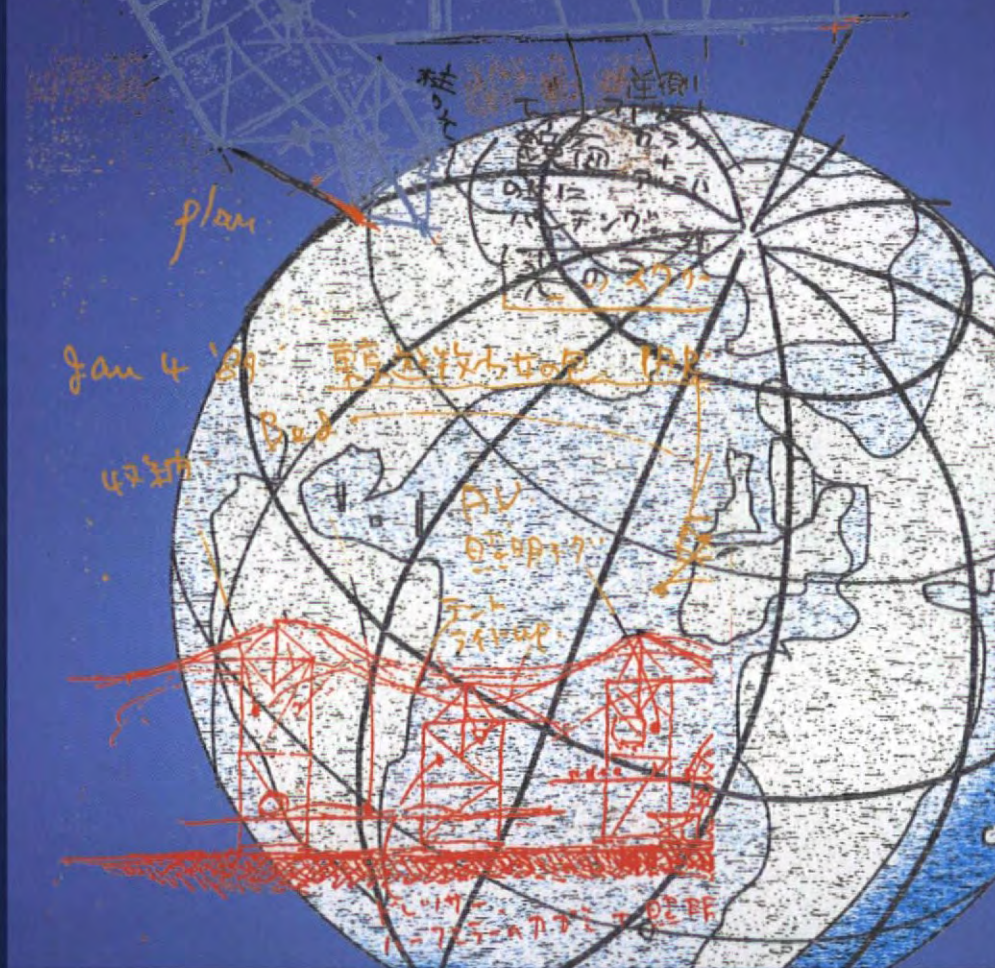


Malaysia – Major architectural practices/design firms

This table was compiled with information supplied by the practices listed.

Architectural practice / design firm	Total architects	Total staff	Total offices	Area of Specialisation											
				Health care	Industrial	Commercial	Office buildings	Housing / Residential	Planning	Interiors	Sport / Leisure / Recreation	Hotel / Restaurant	Education	Laboratories / Research	Transport
AKI-Media	7	22	1			•	•			•	•	•			
AKI Vista	2	10	1	•		•		•	•				•		
Akitek Jururancang (M) Sdn. Bhd.	60	250	-	•	•	•	•	•	•	•	•	•	•	•	•
Akitek Perunding Wesia Sdn. Bhd.	5	18	1		•	•		•			•				
Akitek Regional	5	39	1		•	•		•				•			
Arkitek OA	3	18	1					•		•					
Arkitek FAA	10	51	1			•	•	•			•		•		
Arkitek KDI Sdn. Bhd.	16	70	1	•		•	•	•	•	•	•	•	•		•
Arkitek Kitas Sdn.	10	44	2				•	•				•			
Arkitek L & L Sdn. Bhd.	4	12	3		•	•	•	•							
Arkitek MAA Sdn. Bhd.	45	120	1	•		•	•	•	•		•		•		•
Arkitek Nikareka	2	8	1	•		•		•			•				
Arkitek Teknikarya	15	40	1			•	•	•			•	•			
Asas Architects Sdn. Bhd.	7	-	1						•	•					
CSL Associates	7	25	1	•			•	•	•	•		•			
DC Akitek (M) & Rakan Rakan	4	17	1			•	•	•				•			
Derrick David & Associates	5	30	1		•						•				
Gabungan Arkitek Sdn. Bhd.	4	12	1		•	•	•	•		•	•				
Garis Architects Sdn. Bhd.	9	11	1		•			•	•	•	•				
Ikatan Cipta Bina	10	70	1	•		•	•	•			•	•	•		•
Jurubena Bertiga International Sdn. Bhd.	19	38	3		•		•	•	•	•		•	•		•
Jurubina Ming	2	17	1				•	•	•			•			
Jurubina Unireka	5	22	1		•	•	•					•			
K S Philarchist Architect	2	8	1					•		•		•	•		
Kumpulan Akitek Sdn. Bhd.	36	102	-		•		•	•					•		•
Kumpulan Perunding (1988) Sdn. Bhd.	17	-	1		•	•	•	•			•		•		
L.C. Chartered Architect	3	7	1			•		•	•			•			
L. T. Leong Sekutu	5	19	1	•	•	•		•				•	•		
Lee Architectural Consultancy	1	8	1		•		•	•	•						
Lip Leow & Associates	8	33	1		•	•	•	•		•	•	•			
Laurence Loh Akitek	12	20	1		•	•	•	•		•	•	•			
Malik Lip & Associates	5	45	1		•	•	•	•		•	•	•			
Noor Hazin Azman Architects	7	31	1			•	•	•			•		•		
Ong Keng Poh Architect	10	24	1		•	•	•	•				•			
Pakatan Reka Arkitek	-	50	-		•	•	•	•	•	•	•	•	•		
Perunding Dayacipta	5	20	1			•	•	•	•		•		•		
S N Low & Associates Sdn. Bhd.	15	55	2	•	•	•	•								
Seow Chin Architect	4	6	1		•							•			
T.R. Hamzah & Yeang Sdn. Bhd.	30	76	7				•	•	•	•		•			•
Veritas International	31	95	5			•	•	•	•	•	•	•	•		•

THE GIANTS OF WORLD ARCHITECTURE



THE ANNUAL SURVEY OF THE WORLD'S TOP 250 ARCHITECTURAL FIRMS

World Architecture's 1997 World Survey of the top 250 architectural firms is based on the largest set of data ever produced. Coverage of this unique and authoritative survey has increased by 25%. As ever, WA's report provides not only an authoritative and detailed listing of the world's largest practices, but also a wealth of data included in charts, commentaries and tables examining the figures from

every conceivable angle. In addition, the range of information includes areas of specialisation, charts showing the change in activity-share by region and by market sector, and the international view of which regions will grow or recede this year. The most favoured consultants are listed and trends throughout the construction industry in general as well as within specialist firms are analysed.

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The World Survey will be included in the December/January issue of *World Architecture*. Don't miss out. Subscribe to *World Architecture* today.



Malaysian projects

In May this year Ken Yeang triumphantly declared that for the first time in the 21-year history of his company, TR Hamzah and Yeang, he had signed off three high-profile jobs in Kuala Lumpur within one month – Central Plaza, Menara Budaya office towers and the Casa del Sol condominium development. This is an awe-inspiring feat by any architect's standards. And he knows it. All three of these buildings are testimony to Yeang's ability to talk a good job – not least at Central Plaza, a relatively modest (by Asian standards) 27-storey office and retail tower in Kuala Lumpur's "Golden Triangle Area", on Jalan Sultan Ismail.

Client demands and "Western" references

The client, the Chuang Group, a Hong Kong public listed company, (the Malaysian branch of which is called Malview Sdn Bhd) inherited Yeang from the previous client. The site in fact had three different owners before the current design was formalised. The Chuang Group wanted a prestigious building that would give them value for money with maximum rentable space – for retail on the lower floors with offices above – and a strong corporate image which they believed would most successfully be achieved with a "hi-tech" look. Yeang relates the tale of seeing the client in Hong Kong, and being told, as they gazed out of the window at Norman Foster's landmark Hong Kong and Shanghai Bank, "I want something like that". Yeang is not used to being dictated to by his clients. His philosophy is to ask the client for "the budget and the total area, and leave the architecture to me". But the image of Foster's bank appealed to him, and the strong visual line of the cross-bracing on the east and west facades, and the high quality of detailing both inside and out, reflect the Hong Kong example.

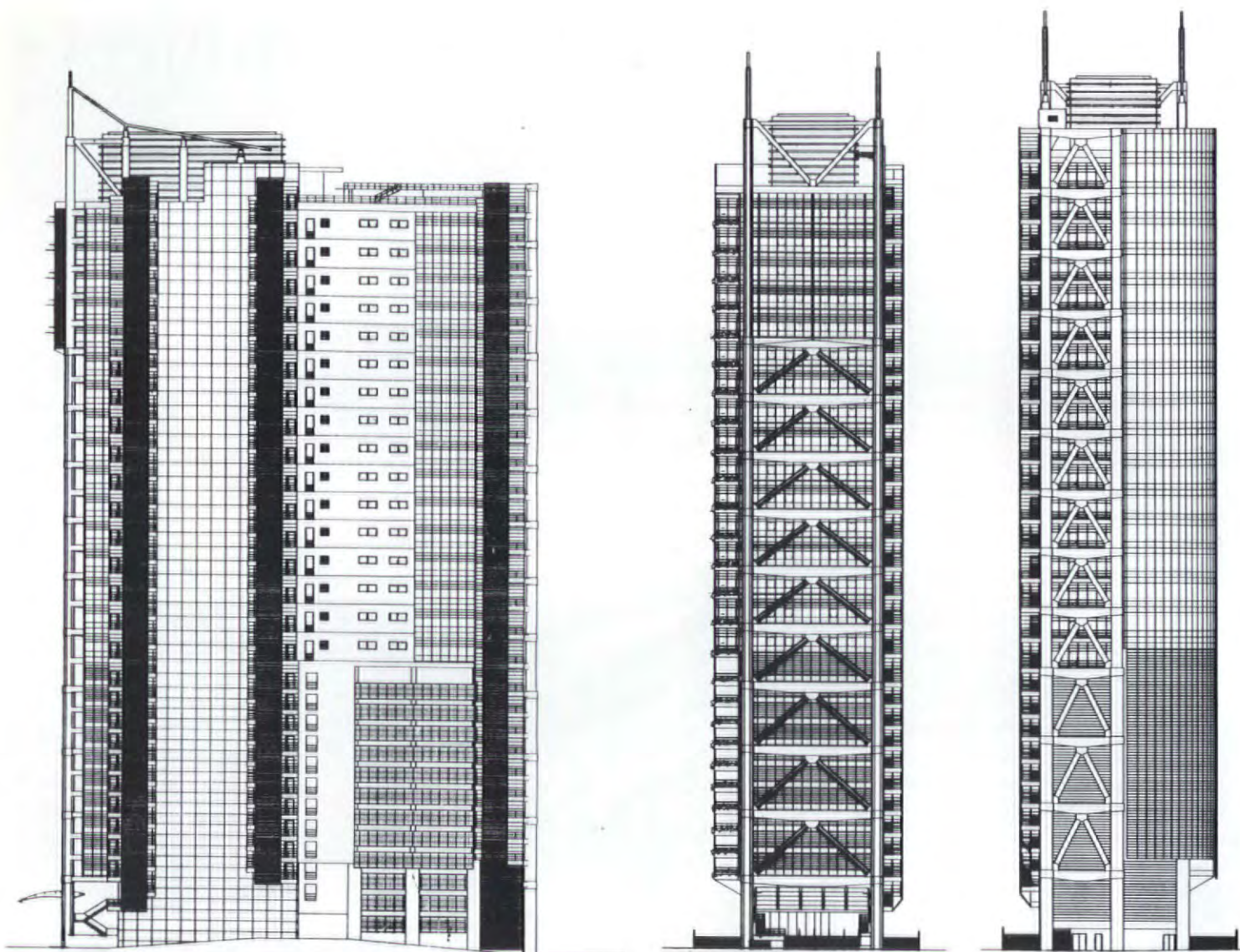
However, the bracing is more than a nod to "Western" precedents, and is fundamental to the structure of the tower. In order to increase the size of the floor plates and provide a column-free interior, a hypothetical middle row of structural columns of reinforced concrete were omitted. The brace therefore compensates for this and prevents the tower from swaying. Most high-rise buildings throughout Malaysia are still concrete – as opposed to steel – frame,

Opposite page The "wafer-thin" tower of Central Plaza, on a narrow site on one of the main streets in Kuala Lumpur, Jalan Sultan Ismail. **Above right** Looking up at the steel-clad bracing of the west facade, through the glass canopy



Centre of it all

Ken Yeang of TR Hamzah and Yeang has long promoted the architecture of Malaysia outside the Pacific Rim. His ability to captivate the imagination and interest of international publishers and architectural institutes is the consequence of his extensive research programmes and built projects for an environmentally responsive architecture. As a result Ken Yeang is Malaysia's best known architectural export. Nicola Turner visited Central Plaza, one of a clutch of the firm's recently completed office buildings in downtown Kuala Lumpur, to see how far his designs have progressed along the bio-climatic path. Photography KL Ng.



Above from the left South elevation; west/entrance elevation; east elevation. Right Cross section showing entrance canopy and glass lobby

due to the availability and therefore expense of steel, although this is slowly changing. Central Plaza is no exception, and is clad in solid aluminium panels, tinted a distinctive rose colour using fluorocarbon paint. The glazing is tinted to match. The structural frame continues beyond the roofline of the tower, with the theoretical provision for expansion – although this would be highly unlikely, given the expense required to create and service what would probably only amount to one more floor. Two characteristic Yeang spikes complete the frame – strictly decoration only. The roof is occupied by a swimming pool which sits on the concrete slabs like a giant ice-bucket, clad in slate tiles, and reached via a curved steel staircase. The cleaning track around the circumference of the pool, doubles as a bench. Palm trees contribute to the feeling of escapism.

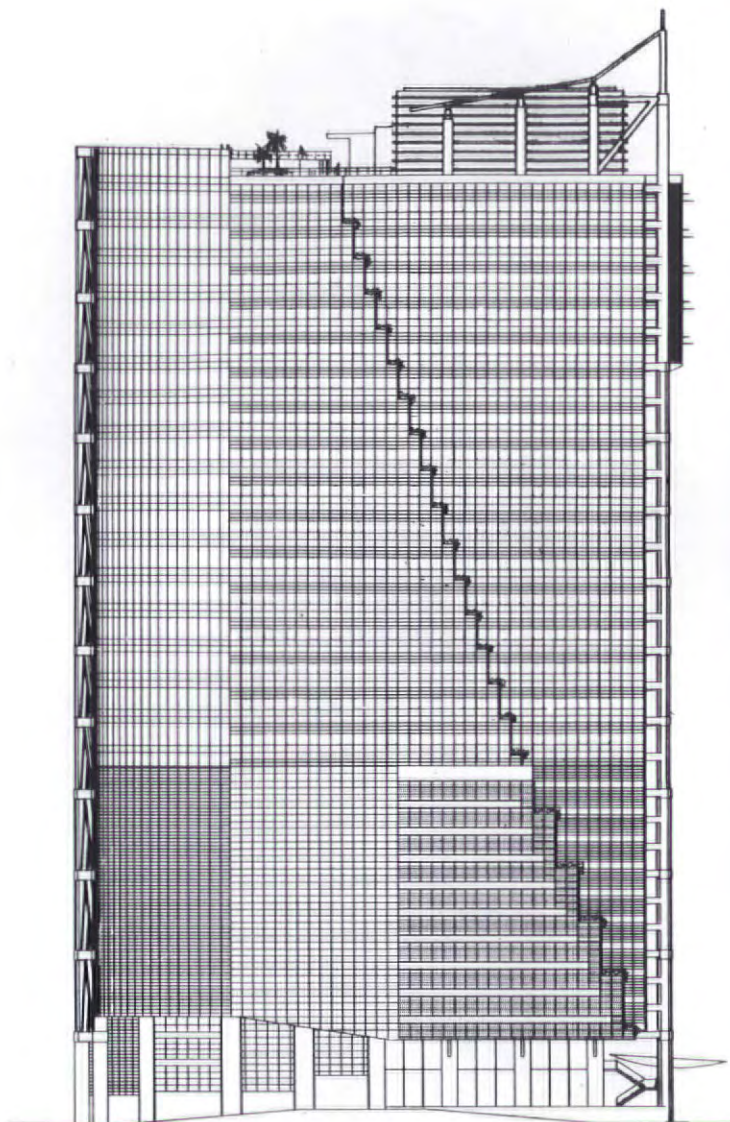
Attention to detail

Detailing is often overlooked in high-rise buildings throughout the major cities of South East Asia. Yeang's attention to quality materials and construction is therefore what distinguishes most of his buildings from their neighbours. The naturally-ventilated lobby immediately gives visitors the impression of a "quality" building. A structural glazed wall on the north side reveals the security room, traditionally hidden from view. A bank of television screens and flashing lights contribute to the hi-tech image. Opposite the security room, sand-blasted glass "fish-scales", secured by steel bolts, "float" above the elevator doors. Looking out of the lobby the glass theme is continued with a transparent glass entrance canopy, through which natural light is filtered, and reflected on the granite-clad floor and walls.

Inside the elevators, more frosted glass – luminated from the floor up – and curved perforated metal screens lighten an otherwise oppressive space. On the ceilings of the corridors running the length of the fifteen office floors, elliptical recesses house light fittings with suspended frosted glass discs. Each major office door is fitted with a sophisticated Philippe Starck-designed door handle. The offices have yet to be fitted out, so it remains to be seen whether this elegant minimalism will be revered or steadfastly ignored.

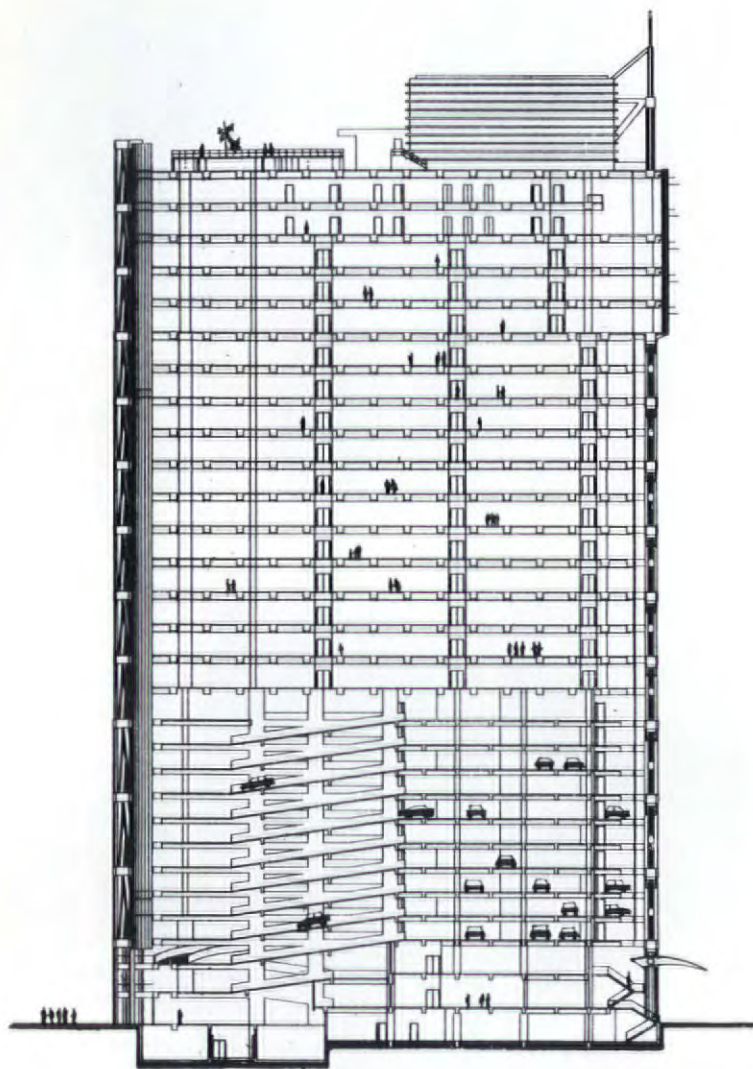
Treading a bioclimatic path

So how far has this design progressed since Yeang's first ruminations on bioclimaticism in his 1972 PhD thesis *Design with Nature: the Ecological Basis for Design*? He explains that his built work, more or less, divides into four



Above North elevation showing stepped planting from parking level, up to the pool side. **Right** Tower viewed from the north-east side, showing cross bracing and curved north elevation, fully glazed to give maximum views of the hills beyond. **Below** Base of the tower with glass canopy

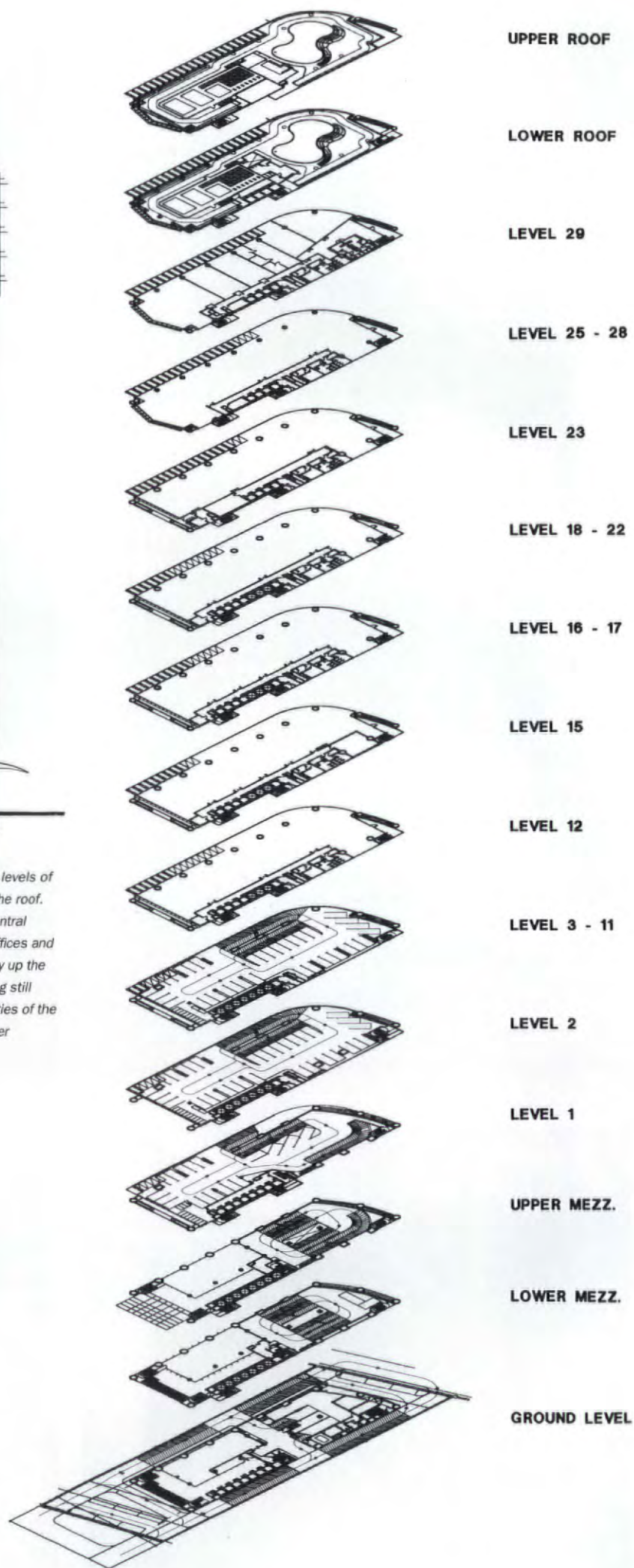




Above East-west cross section showing nine levels of car parking with offices above, and pool on the roof.

Left Model image of the original design for Central Plaza in which two thirds of the building are offices and the other third is a hotel. Two thirds of the way up the building is a void for the swimming pool. Yeang still believes that this design displays better qualities of the "city in the sky". **Right** Floor plans of the tower

Project	Central Plaza
Client	The Chuang Group (Malview Sdn Bhd)
Architect	TR Hamzah & Yeang Sdn Bhd
C&S engineer	Reka Perunding Sdn Bhd
M&E engineer	Jurutera Perunding LC Sdn Bhd
Quantity surveyor	Baharuddin Ali & Low Sdn
Sub-structure	
Main contractor	Piecon Geotechnics Sdn Bhd
Super-structure	
Main contractor	Kemas Construction Bhd
Internal composite	
aluminium cladding	Kemajuan Aluminium (M) Sdn Bhd
Soft landscaping	Asean Landscape Sdn Bhd
Wall/floor	
granite works	Alliance Building Resources (M) Sdn Bhd





Above top A typical corridor leading to the offices, showing the elliptical recesses housing light fittings with suspended frosted glass discs. **Above below** The roof is occupied by a swimming pool which sits on the concrete slabs like a giant ice-bucket, clad in slate tiles, and reached via a curved steel staircase. **Right** The glass-dominated lobby, with structural glass wall screening the security room, and glass "fish scales" floating above the elevator doors



series. The first (up to 1989) was largely experimental and dealt with one big idea in a single building, such as exterior planting or natural ventilation. The second (from 1989-1992) is the aggregate of these ideas, including Menara Messiniaga, the Aga Khan award-winning tropical "venus flytrap" skyscraper on the outskirts of Kuala Lumpur. The third series (1992-1995) focuses more on the architectural aesthetics, for example the Shanghai Tower and Menara UMNO (illustrated in the introduction to this report) and the fourth – and current series – focuses on the mapping of the skyscraper; the creation of the "city in the sky".

Due to the time it takes to construct a tower from planning stage to completion, Central Plaza, perhaps surprisingly, falls within the second series, although Yeang describes it as

"transitional", along with Menara Budaya. It incorporates a "green" element in the vertical planting steps climbing diagonally up the north facade to the pool-side. Natural ventilation is facilitated in the lobby and washrooms, and the escape staircase on the south side is left "open to the sky". The west facade is shaded with a system of louvres and balconies, and the glazing on both the west and east faces are recessed from the structure for sun-shading. The core of the building, incorporating the lift lobby, stairs and washrooms is located to the south. The curved fully-glazed curtain-wall on the north facade gives an uninterrupted view of the distant hills, its sunshade-free elevation forming a geographical indication of the northerly direction.

If the client had agreed with Yeang, and

decided on a development with two thirds offices and one third hotel, the design would have been quite different. The two zones would have been split by a swimming pool cut out two thirds of the way up the tower. This would have reflected Yeang's current investigative research into the "mapping" of these vertical cities. Central Plaza as it is, is hardly revolutionary in this aspect – partly due to the client's final brief, but also because it was designed in the less refined "second series". Most Asian buildings these days are oriented east-west, and have the service core to one side, maximising floor space. But despite these reservations Central Plaza is still quite obviously a Hamzah & Yeang building. It stands head and shoulders above its neighbours, even if not in height, then in quality and design. **WA**

Great expectations

Jimmy Lim is as well known amongst the architectural community in Malaysia as Ken Yeang. But he does not aspire to the same internationalism. Instead his career has been focused at home. In July he witnessed the opening of his largest commercial project, the Awana Hotel and Resort, in Kijal, Terengganu, on Malaysia's north-east coast. He was asked by the client to submit a concept for the hotel when he criticised their proposed scheme of anonymous high-rise blocks. The project is unusual for Lim in several ways, not least because he had to surrender control of the building to the executive architects, Arkitek Istibina, after the concept was submitted. Nicola Turner visited the hotel to see if this might be the start of a new chapter for CSL Associates.

Below View of the north-east elevation from the beach, showing the open-air fire escape to the far right. **Opposite page** View from the northern end of the main block – above the conference facilities – looking down on the atrium space with the lift shaft at the southern end and the bedrooms off the balconies to the east, facing the sea

A direct result of the economic boom currently sweeping Malaysia is a demand for more luxury hotel accommodation. The danger is that idyllic hideaways give way to high-rise blocks erupting on the picturesque coastline as architects are denied adequate time to come up with more imaginative schemes. Jimmy Lim, a renowned Malaysian architect of Chinese origin, and principal of CSL Associates, has long been associated with understated, "vernacular" design – although he would heartily disclaim this pigeon-hole description. After all, what is "vernacular" in a 33 year-old country, which counts Malays, Chinese, Indonesians and Indians amongst its population?

Concept planning

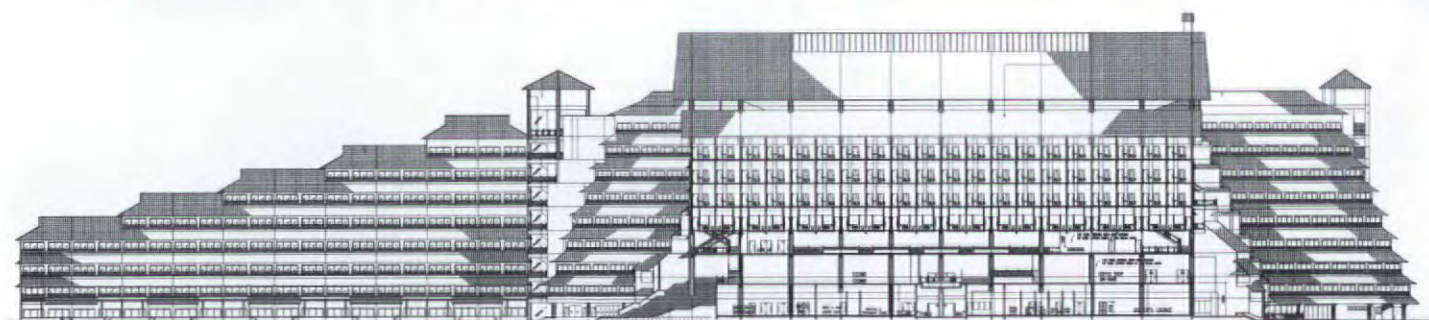
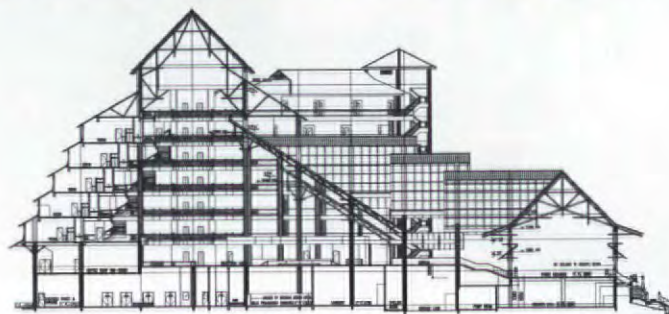
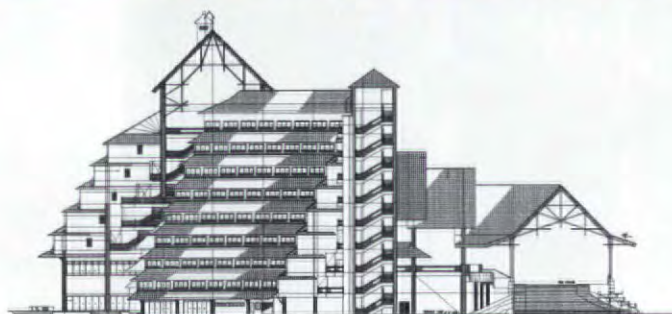
It was Lim who provided the concept for the 300-bedroom Awana Hotel on the north-east coastal resort of Kijal in Terengganu after a chance viewing of the plans for yet more ubiquitous blocks. The client was intrigued by Lim's disquiet for the proposed hotel, and gave him the opportunity to come up with something better. He had the weekend to provide the answer.

Walking around the monumental hotel with Lim is a bitter-sweet experience. He is clearly





Below left and right Computer generated images from executive architects, Arkitek Istibina, showing west/entrance elevation, left, and east/beach elevation, right. **Middle left** North elevation. **Middle right** East-west cross section. **Bottom** North-south cross section



delighted that a scheme of such scale should have come to fruition. Most of his projects, although architecturally significant, have hitherto been smaller-scale domestic commissions – although his office is now working on a tower for the Pacific Bank in Kuala Lumpur, and further down the road from the Awana – in Cherating Pahang – is a smaller hotel by Lim, the 150-room Impiana, completed in 1993.

Sensitivity to site

From both the air and the road the red tiles of the terraced hotel look unobtrusive. The site on which the Awana has been built was relatively clear, and few trees had to be felled before building. The land is sandy and dry, and the building has been constructed on stilts, to avoid the need for levelling the ground precisely, and to afford a transparency and lightness of structure from the east and west viewpoints. The complex stretches along the coast, incorporating the numerous

leisure facilities now demanded by visitors to luxury hotels, as well as top class conference facilities in the northern volume of the atrium space. A golf club is attached to the north wing of the hotel. The central core of the hotel was opened in July this year, and the rooms in the north and south wings will be finished by the Chinese New Year, 1997.

Maximising natural ventilation

The concept for the hotel is based on natural ventilation, easy circulation and clear sightlines from the entrance through to the beach, and from the bedrooms looking out onto the beach. Cross ventilation is achieved by centering the plan on a grand atrium of cathedral scale. The rafters of the timber roof in the *porte cochère* and the atrium have been left exposed, exaggerating the scale and making reference to the rural setting of the hotel. The glass at the apex of the roof is approximately 30 metres

from ground level. The harsh sunlight entering through the glass is filtered through the timber beams, and a breeze – which blows through the atrium from the sea from 10am until 7pm, when it turns and blows off the land – cools any heat emission. Because Malaysia's climate is more or less constant throughout the year the hotel can remain open to the elements. There is no "front door", and 24 hour service ensures security. The open nature of the plan ensures a complete integration of the interior with the exterior. Birds circle the rafters, and diners in the restaurant can rest their arms on the open window frames as if eating on a veranda.

Arkitek Istibina have also adhered to the original plan of single loaded bedrooms all facing out towards the sea. The rooms in the central block are reached from open balconies running the length of the hotel. Lim's intention here was to echo the even, terraced profile



Left The brightly coloured mosaic floor of the atrium with a fountain obstructing the view from the entrance through to the sea. **Below left to right** Looking up from the coffee house to the glass at the apex of the timber roof. The intricate exposed timber of the porte cochère. The Awana hotel at night, showing its transparency and open plan.

Bottom West elevation



of the exterior on the interior. The executive architects, however, have extended the first floor balcony to include a wide concourse, thereby losing the symmetry and obscuring the sight line down to the entrance of the coffee house below. Obligatory air conditioning is supplied, but on opening the windows – which run the full width of the bedrooms – it automatically cuts out, leaving the natural breeze and the ceiling fans to cool the humid air.

Giving way to client demands

What is lacking from Lim's original design is an understanding of his sensitivity to the ground level sightlines of the atrium, and maximising the potential of a tranquil setting. The architect has been forced to take a pragmatic approach to handing over the design to executive architects, in the knowledge that he effectively lost all control over the interior design and detailing. This is not something he would choose to do as a

matter of course. The commission for the Awana is extraordinary in every way.

Although of Chinese origin himself, Lim explains that many of his countrymen appreciate bright and garish colours and fabrics. The client, interior designer, and the majority of the guests at the Awana, have Chinese roots, and this might explain the lack of subtlety in the interior decoration. Most offensive are the giant translucent palm leaves adorning the columns around the reception desk. But more upsetting to Lim is the fountain placed directly on the axis between the flight of entrance steps, through the restaurant and onto the beach. Not only does this "water feature" destroy the axis, it also contributes a gushing torrent of relentless noise. Perhaps, Lim explains, this is because "many Asians of the older generation don't like quietness".

It is the treatment of the interiors that most obviously distinguishes Lim's priorities from

those of many of his contemporaries. He believes that "in the tropics many of the architectural spaces should be experienced at dusk and at dawn, when it's quieter and cooler." In the silence of the late evening, once the echoing footsteps of travellers and conference delegates have died away, and the colours are muted in the dim light, there is a chance to glimpse his vision. Whether he could swallow his pride and play second fiddle again remains to be seen. **WA**

Project	Awana Kijal Beach and Golf Resort
Client	Kijal Resort Sdn Bhd
Concept architect	CSL Associates
Project architects	Arkitek Istibina
Structural engineer	Arup Jururunding Sdn Bhd
Service engineer	KTA Tenaga Sdn Bhd
Cost consultant	Project Management
Interior design	Juruhiasan Consult
Landscape architect	LDR Consultants



The road to success

Malaysia's aim is to become a nation with "fully developed" status by the year 2020. To this end, the Prime Minister has been concentrating his efforts on creating an efficient and profitable industrial culture, spearheaded by the birth of a national car: the Proton. Group Design Partnership's office and showroom complex for Proton reflects the confidence and glamour of the enterprise, using hi-tech references to their British educational heritage. Text: Nicola Turner.

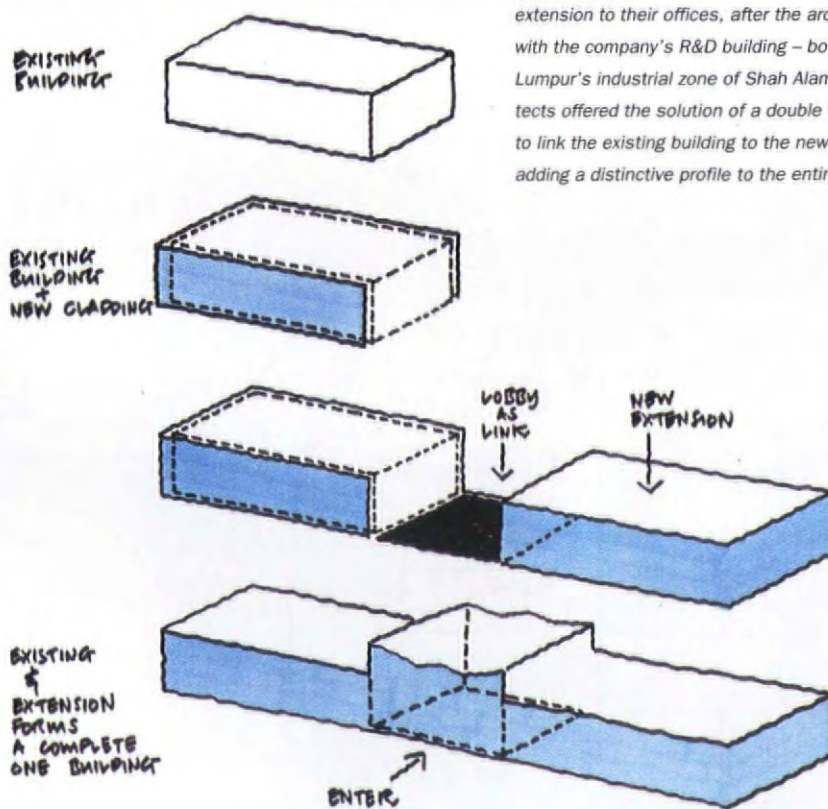
In 1984 the Malaysian Prime Minister Datuk Seri Dr Mahathir Mohamad promoted the creation of a reputable car manufacturer for the basis of Malaysia's industrialisation. In order for the country to clamber up the economic ladder the Prime Minister realised that it would have to prove itself in industry – and what more visible way to show the wealth and prosperity of the nation than through the production of cars? Initially, Proton was set up in association with Mitsubishi. It now stands as an almost entirely independent manufacturer, producing numerous different designs, and exporting around the world. The company is central to Malaysia's programme towards achieving "fully developed" status by the year 2020.

In keeping with this progressive enterprise, the company commissioned the young firm Group Design Partnership (even now only five years old) to design their research and development building. On the strength of this project



Proton re-employed GDP to extend their offices close to the R&D building, within its manufacturing and assembly plant in the industrial zone of Shah Alam. The architects suggested integrating the new horizontal band of offices with the old block by cladding both in composite aluminium panels, using a sophisticated modular interchangeable system, and linking the pair with a double volume showroom. The modules may be changed by virtue of the fixing system, which "hooks" the panels on. The added advantage to this design is that the panels are not sealed, and therefore create a "breathing skin". The vertical panels incorporate concealed U-channels to drain water away. Static sun louvers, also clad in aluminium, run the length of the building.

The distinctive profile of the 675 square metre showroom is echoed on both the south and north elevations. The linking space is entirely glazed, enabling a light source from the side, front and back, and affording a view

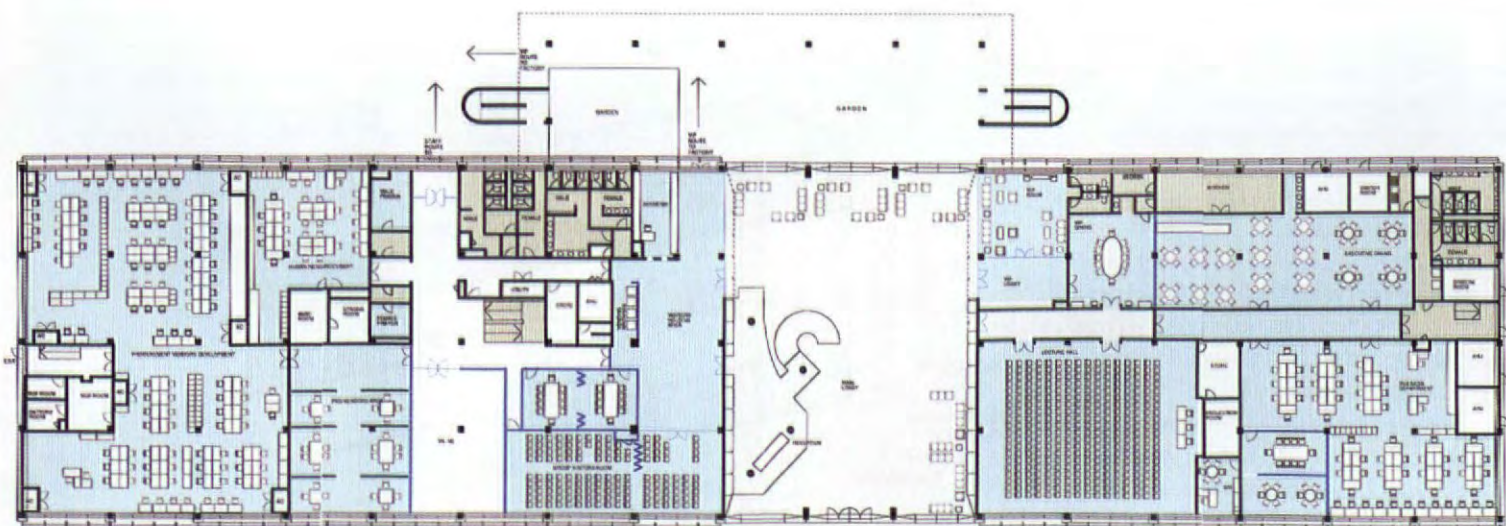
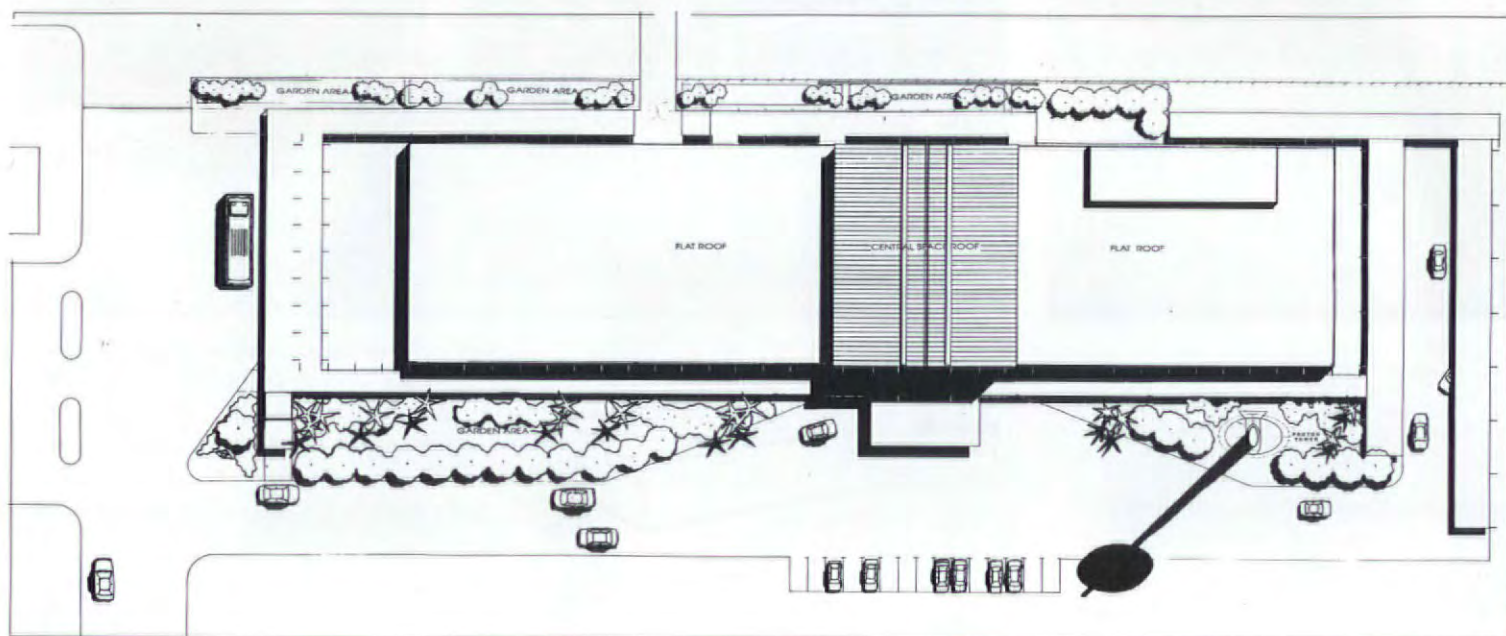
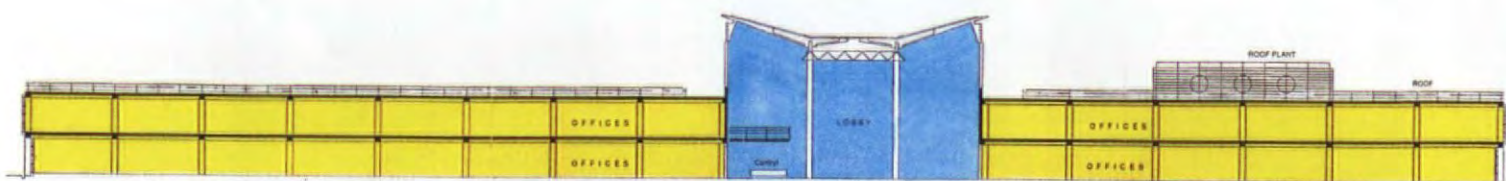


Above GDP were commissioned by Proton to design an extension to their offices, after the architects' success with the company's R&D building – both in Kuala Lumpur's industrial zone of Shah Alam. **Below** The architects offered the solution of a double volume showroom to link the existing building to the new extension, thereby adding a distinctive profile to the entire block



Above Computer generated image of entrance elevation.

Below from top Longitudinal section; roof plan; floor plan





Left Interior view of the showroom, glazed on both sides, with stairway to the right. **Bottom left to right** The distinctive profile of the roof; the static louvres and composite aluminium panels installed using a sophisticated modular interchangeable system; computer generated image of entrance elevation



through the showroom to the courtyard behind, and to the external linking bridge between the two opposite office wings on the first floor – to avoid the need to walk through the showroom. Management offices and a conference facility on the first floor do, however, have direct access to the central space. All the details, from furniture to the light suspension system, have been custom designed, and contribute to an air of luxury and refinement, in line with the image promoted by Proton's new models which are constantly on display. Only details such as the bulky angled staircase by the reception desk are clumsy and self-conscious, and betray the firm's relative inexperience. Projects currently on site, and on the drawing board, already show signs of wisdom gleaned from the Proton experience.

The Proton scheme directly reflects the GDP principal partners' British training. The project architect in charge, Kamal Latiff, was educated at the Architectural Association, and subse-

quently worked with both Sir Norman Foster, and Ron Herron. Kamil Merican, the other key player in the firm, worked with Nicholas Grimshaw and Terry Farrell, before they set up individual practices. Both agree that "more than 60 percent of the good Malaysian architects are UK-trained". GDP have inherited the British hi-tech tradition, and insist that they are "British" when it comes to design concepts and detailing, although "the intensity here is lessened because there is so much going on". By that Latiff means that in Malaysia the quality of the detailing which distinguishes some of the finest hi-tech designs in Europe, is lacking. This is due to both the pressure of time, and the availability of materials, particularly steel. The final oblique reference to their British heritage is the 25 metre free-standing steel pylon displaying the neon Proton logo, reminiscent of Powell and Moya's Skylon, at the 1951 Festival of Britain. At Proton GDP have shown the basis of what they have to offer. They promise much more.

WA

Project	Proton main building
Client	Proton
Architects	Group Design Partnership
C&S engineers	Jurutera Perunding Setiaraya Sdn Bhd
M&E engineers	Jurutera Perunding Valdun Sdn Bhd
Quantity surveyor	YS Chan & Associates
Contractors:	
Main contractor	Ho Hup Construction Co. Sdn Bhd
Cladding, curtain wall, louvres	Khalid Aluminum Industries Sdn Bhd
Structural steelwork	Shin Wa Metals (M) Sdn Bhd
Composite Aluminium panel claddings	Reynobond USA
Contractor	Khalid Aluminum Industries Sdn Bhd
Metal Ceilings	Simplex Metal Ceilings
Supplier:	Superior 84 (Malaysia) Sdn Bhd



Building relationships The work of WGK

For over half a century Germany's social market has shaped the work of WGK. With a portfolio stretching from public housing through hospitals and insurance buildings to government offices, their speciality is unquestionably what might be called "relationship architecture": large, usually institutional projects where success comes not from architectural pyrotechnics but from close collaboration with clients and users, often over several years. It is an approach rooted in Germany's post-war industrial culture; but WGK believe that it can also be extended across Europe and beyond.



If you want a symbol for Germany's social market, take a trip to a small site opposite Hamburg's largest container port, in the shadow of the massive new Elbe bridge. There you will find half a cargo ship sitting on dry land and a building filled with seminar rooms and lecture theatres. In the space between the two, men in overalls and helmets solemnly manoeuvre fork-lift trucks within marked out areas and practise craning containers into the ship's hold. This is Hamburg's School for Dockers – almost unimaginable in any country where the "social overhead" is lower than in Germany (the only other comparable school is in Denmark).

The School's designers were WGK, whose

main office is in its own way equally evocative of Germany's postwar social contract: a former union headquarters, it is located in one of Hamburg's lushest and most affluent suburbs.

Founded in 1945 as Wunsch & Mollenhauer, WGK's prosperity has grown with that of Germany. "At that time," says owner/director Dieter Krüger, "the primary priority was to put up accommodation as quickly as possible. This office was almost entirely connected with the building of apartments or housing. So it started in a small way and the word got around."

By the time Krüger joined the firm in 1961 it had built a solid reputation for public sector architecture. A partner by 1967, Krüger became sole principal 20 years later. The tim-

Above left to right Otto Mollenhauer, Gustav Gleichmann, Otto PM Wunsch, Dieter Krüger. Opposite page Detail of the Volksfürsorge building, Hamburg

ing proved fortuitous: fortunately for WGK – as for all German architects – the country's late-1980s boom was to be followed by the wholesale rebuilding of eastern Germany. For WGK it was the second programme of national reconstruction it had enjoyed since its foundation.

Meanwhile the long-term nature of many of its projects – such as hospitals – has allowed it to avoid any "boom and bust" syndrome. "There aren't even 20 companies in Germany who would be capable of bringing the same



Above Owner/director Dieter Krüger.

"This company has been 51 years in existence and you cannot maintain a company of this size without new intake and constant redeveloping – constant renewal."

expertise to hospitals," says Krüger. "By continually putting ourselves forward for new hospitals we keep ourselves up to the state of the art." Thanks to the firm's skilful management of such projects, turnover has now reached US\$ 17 million.

The foundation of Germany's industrial culture is the principle of negotiation and consensus, of which relationship architecture is the quintessential expression. Even within WGK's offices, companies operate in a kind of intimate symbiosis: in 1988 Krüger founded the independent engineering company IGK, designed to best respond to the pattern of professional responsibilities within Germany. WGK and IGK staff – 125 in all, with fifty per cent of the architects being women – now work alongside each other; some staff even work for both companies.

Designing for Germany's social market does have certain implications. Procurement is more likely to be by direct commission than by competition. Projects may be long-drawn-out and occur in successive phases as budget con-

straints allow. Long-term partnerships can lead to the forging of strong bonds between architect and client.

"Since about two-thirds of our commissions come directly through our clients," says Krüger, "our ideas are developed in conjunction with the client." A prime example is WGK's office for the insurance company Volksfürsorge. WGK's relationship with the client began in 1988 with the construction of a large extension to the company's existing offices in the centre of Hamburg. The project's final phase involved the refurbishment of the company's existing offices, part of which dates from the nineteenth century and part from the 1950s.

Everywhere in the building there is evidence of WGK's skill in providing clients and unions with what they want – a vast and flamboyant canteen space worthy of a luxury restaurant; circulation space to spare; an architectural flourish in the shape of a wavy communicating corridor across the central light-well; and landscaping even on the roof,

where it is seen only occasionally from a rooftop seminar area. Working conditions don't come much more agreeable than this.

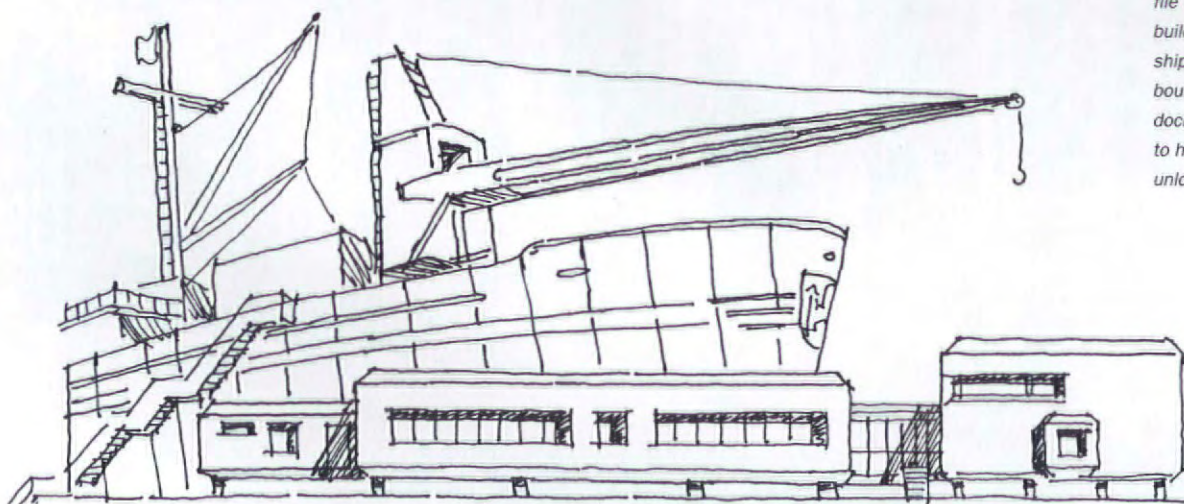
WGK's pattern of activity is in marked contrast to a firm such as Harald Deilmann's, which has always concentrated on designing for the country's extensive and officially-required competitions sector. Krüger describes the distinction as between "practical" and "competition" architects: "From the beginning our philosophy has tended towards the practical, and in particular we have tried to realise the client's ideas and to save him as much work as possible from the initial idea to handover."

Both branches of the German profession have developed in very distinct ways. Like a species inhabiting an unstable ecosphere, the "competition" branch needs to stay versatile to survive – witness Deilmann, famous for refusing to specialise in any one building type. The "practical" firms, on the other hand, live on a diet of government and institutional commissions – jobs that tend to take a long time from



Two buildings whose structures underline Hamburg's historical association with the sea.

Above The Chilehaus, one of WGK's high profile refurbishment projects. The exterior of the building tapers between city streets to a ship's prow-like corner. **Below left** The Harbour Technical College, Hamburg's school for dockyard workers, uses part of an actual ship to help train workers in the loading and unloading of cargo





start to finish and are often split into innumerable construction phases. What this amounts to is a stable evolutionary climate which, like a rainforest, rewards specialisation and symbiotic relationships.

Krüger agrees that with a negotiated commission there is less scope for "exciting" architecture: "It's absolutely clear that if you work for one client this is something that you have to accept." But the difference between the two, he suggests, is not cut and dried. "A direct order from a client doesn't give you boundless opportunities to develop your ideas for a building, but then a competition doesn't guarantee first of all that you'll win it, or that you'll be successful in realising your architectural ideas."

In fact, although they are chiefly known for directly commissioned work, WGK do participate in competitions – and often win. To this end, offices are organised to make the most effective use of staff creativity.

In some other firms, new recruits brimming with ideas are systematically demotivated at an early stage by being force-fed on

"...Young people come into the company from the schools. They all have their ideas, they want to be architects, to develop their own ideas, to build their own buildings," he explains. "If you encase them in your preconception of what you want, you kill their motivation entirely."

Architects have to earn the right to continue in the concept planning division: "Some show they have a genuine talent for architecture," says Krüger, "while others who think they have, discover they haven't and move on to another area... Not every student is suitable for working in the preplanning department, but if they have the talent they have the support that they need."

WGK's second division consists of design teams: one per project. "Teams have almost complete freedom to develop their own ideas," says Krüger, "... each of the members of the team is allowed to bring all their own original ideas and throw them around." The task of co-ordinating these ideas falls to Wolfgang Everts, whose relaxed manner

department, both overseen by Gerhard Koch.

"This means that with 51 years' experience behind them," says Krüger, "they're sure to create satisfied clients... What I'm interested in is presenting good architecture at a reliable standard, reliable costs and, above all, meeting deadlines and giving the client the absolute best technical quality."

In a small way WGK's attitude to older staff symbolises the continuing viability of many of Germany's social provisions even in a more competitive environment. In a profession in which experience is at a premium, ideas that may retain a superficial appeal, like "downsizing" – at its crudest, sacking anyone over 50 – can be seen to have no practical benefit whatsoever.

This corresponds with another way in which, according to Krüger, the trend in German architectural management is in the opposite direction to the current wisdom: "In contrast to the United States where people are trying to make everything simpler," says Krüger, "everything here in Germany tends to go more



"In contrast to the United States where people are trying to make everything simpler, everything here in Germany tends to go more and more towards perfection – there must be a better way to do it."

working drawings: only older, longer-serving staff earn the right to do concept design. Never mind that this is self-evidently perverse, with a building's structural and waterproofing integrity in the hands of the inexperienced and its conceptual design in the hands of those whose creative spark may have dimmed.

At WGK, by contrast, young architects who show talent for design are placed directly in the concept planning division – one of four main divisions in the office. For Krüger this is an indispensable factor in maintaining WGK's creative potential: "This company has been 51 years in existence and you cannot maintain a company of this size without new intake and constant redeveloping – constant renewal."

belies the struggle to resolve competing demands that is an inevitable part of being a manager. "The most important thing in all these teams," says Krüger, "is the adaptability towards the team that brings up the team spirit: a very important motivator."

WGK's focus on youthful creativity is counterbalanced by an unusual interest in rewarding loyalty among long-serving employees, who account for a quarter of all staff. Whereas older staff may not be able to compete with younger architects in fecundity of imagination, the firm believes that there is no substitute for experience in specification, in supervision and negotiation work. These skills come into play in WGK's third and fourth divisions, the billing and tender action department and the contract administration

and more towards perfection – there must [always] be a better way to do it."

The prevailing atmosphere of economic insecurity in Europe is often blamed on trade globalisation. But Krüger's model of international collaboration points to a different spirit, building working relationships across international boundaries. In the early 1990s WGK collaborated in an attempt to set up a Europe-wide network of architects, channelling investment from rich economies to the emerging markets.

"DY Davies initiated the idea of a European group of architects to bring everyone together," says Krüger. "This co-operation amongst architects throughout Europe was to work from Moscow to Madrid, through any of the countries you can think of. To give you an



Opposite page Accident Hospital, Hamburg. A consistent design philosophy has enabled WGK to work with this client for over 30 years

example, in Brussels it would be impossible for a German company to be able to go through the planning permission, the applications and all the legal formalities. So, working on a project in Brussels, we used a local company to clarify all these details. This is the way we should go as architects in the future, in order to maintain professionalism and actually meet the demands of the market."

The way forward, in other words, is not for standards in different countries to converge,

but for architects in different countries to collaborate.

"Clients want to deal with people they feel they can trust," says Krüger. "They say, 'We want this, please build this. How you manage the rules and regulations of your country is your problem.'"

"But there's a tradition of building in each country and each country attacks it in different ways," he continues. "What's the norm here would probably not be acceptable in Britain.

So if you plan and design a building here you have to get local people to supervise it and to see to the historical aspect of building. But you can't deal with people you don't know: you can't just ring up a company out of the telephone book, so obviously the idea that Davies had of companies working with one another is the only safe way to do it."

In other words it comes down, once again, to building relationships. And that is something that WGK seem to do rather well. **WA**

WGK Company data

Title of firm

Architekturbüro WGK, Dipl Ing Dieter Krüger, Freischaffender Architekt BDA

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Contact: Ms Sproetge Tel 49 40 822 80 112

Other offices

Steindamm 33, 20099 Hamburg
Kastanienwall 52, 31785 Hameln
Building 184, suite 1072, 60549 Frankfurt/Main (airport)
Moritzburger Weg 67, 01109 Dresden
Badestraße 2, 39114 Magdeburg
Werkstraße 215, 19061 Schwerin

Formed 1945

Sole Principal

Dipl Ing Dieter Krüger
Born: Bremerhaven, June 26, 1935.
Education: Technical College "Fachhochschule Bremen, 1955-58
Career: Employee, Joachim Fritz, Hamburg, 1958-59.
Employee, Schöne & Schudnagis, Hamburg, 1959-61.
Architectural office Architekturbüro WGK, Hamburg, 1961-1986. Sole owner, Architekturbüro WGK, Hamburg, 1986 to date. Qualifications and awards: Member of several chambers of architects in Germany.

Key personnel

Dieter Krüger (Owner/Director)
Wolfgang Everts (Manager planning)
Gerhard Koch (Manager projects)

Staff

Currently about 110 employees including architects, engineers, town planners, technicians and support staff. Architects/engineers account for 82 percent of staff.

Turnover

1993: US\$ 12.25 million
1994: US\$ 15 million
1995: US\$ 16 million
1996: US\$ 17 million (expected)

Major clients (selection)

Berufsgenossenschaftliches Unfallkrankenhaus Hamburg (Professional association for health care)
Bau-Berufsgenossenschaft Hamburg (Construction trade association)
BfA - Bundesversicherungsanstalt für Angestellte (Public insurance company for employees)
BHW - Bausparkasse AG (Building and loan association)
BfG - Bank für Gemeinwirtschaft AG
BWB Deutscher Beamtenwirtschaftsbund GmbH (Association for civil servants)
FAG Flughafen Frankfurt/Main AG (Airport association)
Familienfürsorge (Insurance company)
Freie und Hansestadt Hamburg (City of Hamburg)
Finanzbauamt Hamburg (Tax authority)
Gesamthafenbetriebs-Gesellschaft mbH (Association for harbour workers)
LVA Landesversicherungsanstalt Mecklenburg-Vorpommern (Public insurance company for workers)
Scandinavian Partners (Swedish development association)
Volksfürsorge Versicherungsgruppe (Insurance company)

Areas of specialisation

Medical and health insurance companies
Insurance companies
Hospitals & health care (accounts for 40 percent of work)
Public corporations
Unions
Private companies
Private clients

IGK Company data

Title of firm

Ingenieurgesellschaft Krüger mbH (IGK)

Head office

Humannstraße 42, 22609 Hamburg
Tel +49 40 822 80 10
Fax +49 40 822 801 57
Contact: Ms Sproetge Tel 49 40 822 80 112

Other offices

Steindamm 33, 20099 Hamburg
Kastanienwall 52, 31785 Hameln
Building 184, suite 1072, 60549 Frankfurt/Main (airport)
Moritzburger Weg 67, 01109 Dresden
Badestraße 2, 39114 Magdeburg
Werkstraße 215, 19061 Schwerin

Formed 1988

Owner/Managing Director

Dipl Ing Dieter Krüger

Key personnel

Dieter Krüger (Owner/Managing Director)
Markus Mohn (Representative)

Staff

Currently about 15 employees including architects, engineers, technicians and support staff.

Turnover

1993: US\$ 1.5 million
1994: US\$ 1.5 million
1995: US\$ 4 million
1996: US\$ 4.5 million (expected)

Areas of specialisation

Master planning/project management for building construction
Technical building equipment (heating/air conditioning/sanitary/electrical installations including conveying facilities)
Structural engineering/load bearing systems
Planning, calculations, construction supervising, inspection, construction accounts, efficiency tests, consultation studies, expert opinions, technical software

Projects



Above Exterior detail showing sweeping pitched roof.

Below Low-rise building has presence without overwhelming the site

LVA Mecklenburg-Vorpommern

Brief: Head office for a public insurance company for workers in Neubrandenburg.

Challenge: 18,000 square metres of offices had to be accommodated without overwhelming the site.

Solution: WGK were winners of a limited competition to design this building. Situated between a forest and a growing residential area, it is a low-rise development with sweeping pitched roofs. Grouped around two atria, individual office wings define a series of distinctive spaces, each with its own character. Meanwhile, the building's articulation ensures that only parts of it can be seen at any one time, helping to reconcile the building's scale with that of nearby houses. Standing in marked contrast to the rectilinear offices is the circular canteen with a conical roof.

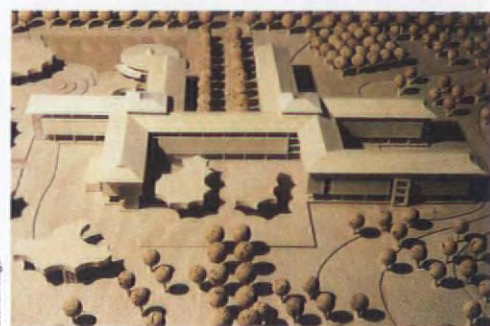
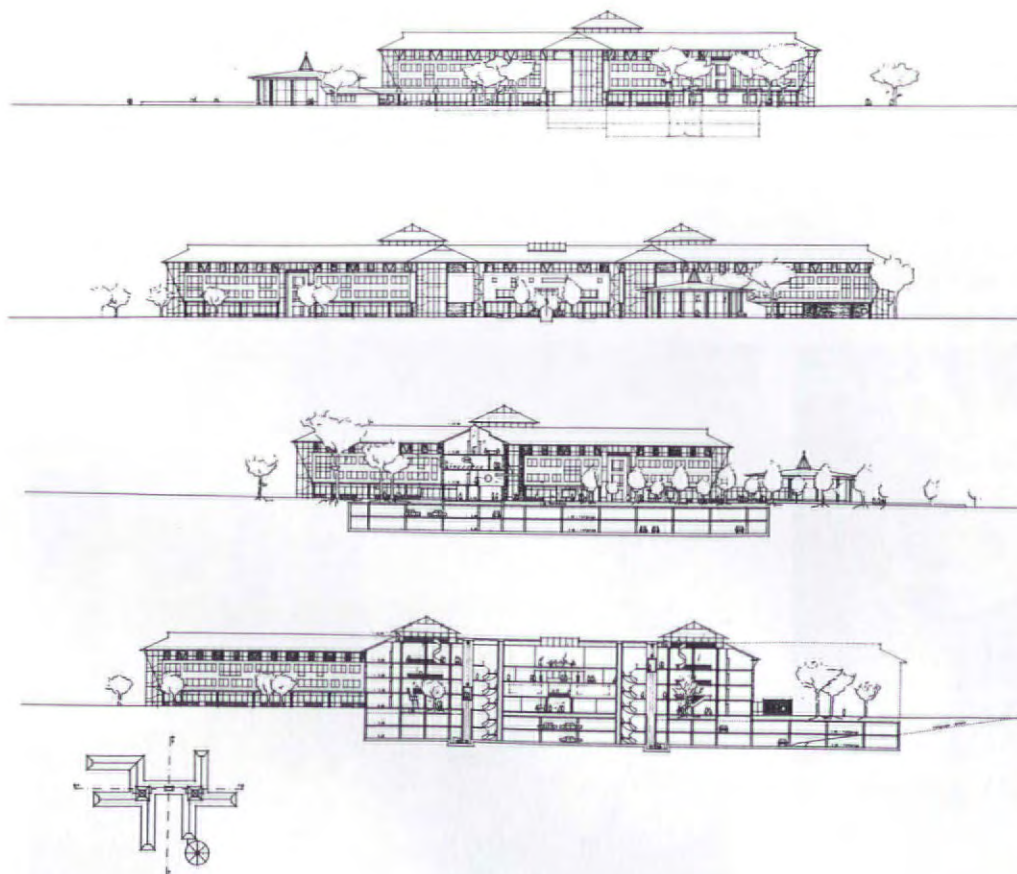
Date: 1993-1996



Photographs on this page by Erik Chmili



Top left and above Roof and glazing details showing wide eaves. **Above left** The circular canteen building with conical skylight. **Left** Elevations and sections. **Below** Model view





Extension to Familienfürsorge building, Detmold

Brief: Additional offices for insurance company (fourth extension of office building).

Challenge: In contrast to the suburban LVA offices in Neubrandenburg, these offices were located in an historic town centre, near a castle in a parkland setting. The challenge was one of fitting the new extension into its context.

Solution: The building, providing 34 new offices, was part of a complete urban design scheme that formed a public courtyard in combination with existing buildings. Massing and proportion were derived from local precedent, while the choice of building materials helps maintain a small scale in keeping with its surroundings. The fully-glazed top storey provides

two training rooms with direct connections to the cafeteria and roof terrace located in the existing building alongside.

Date: 1992-1994





AOK Hamburg

Brief: Medical insurance headquarters.

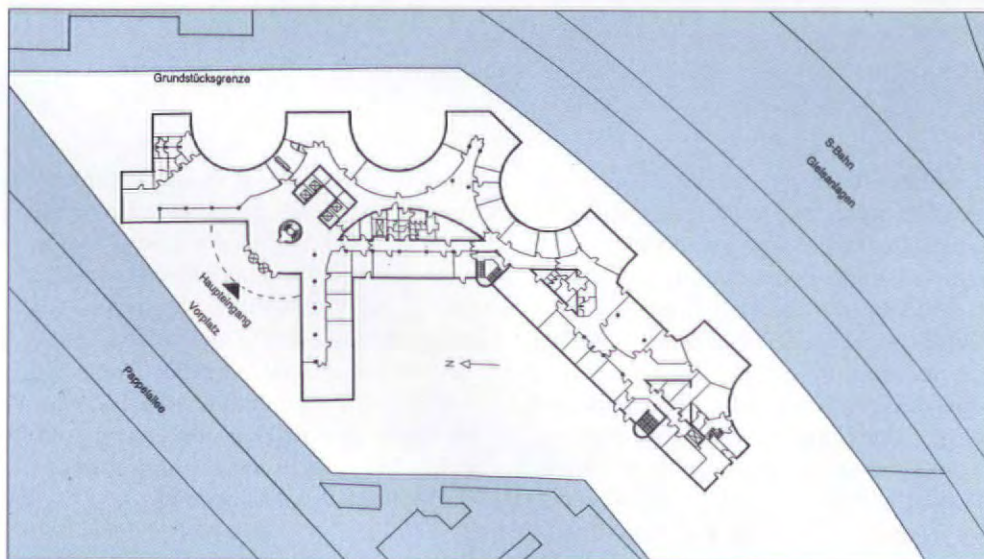
Challenge: 27,000 square metres of gross floor area had to be accommodated on a narrow but deep site that was cranked and lay at an angle to the road.

Solution: The plan wields the subtle combination of a welcoming entrance flanked by two wings, a gentle curve which "steers" the building round to make full use of the site, and a series of

semi-circular recessed bays on the rear facade to maximise the opportunity for offices with external windows in an otherwise deep plan. Urban design was considered an important factor. Consequently, the plan's articulation creates a pattern of light and shade and ensures that viewers from the road see only part of the building, making it seem smaller than it really is.

Date: 1990-1993

Above Wings on either side of the entrance welcome visitors into the double height entrance foyer **below**. The plan **below left** shows the bays on rear of building which maximise the number of naturally lit offices





Leika Fotografie/Bernadette Grimmerstein

Volksfürsorge Norderstrasse, Hamburg

Brief: Large extension and refurbishment of existing main offices for health insurance company, located in the city centre.

Challenge: 63,000 square metres of floor space and 440 parking spaces had to fit on a patchwork of sites adjacent to Volksfürsorge's existing headquarters, under the very watchful eyes of the local planning department. Despite its size (the main facade had to be 150 metres long) the building had to retain a human scale, while German practice required a large canteen sufficient to serve 2,000 employees.

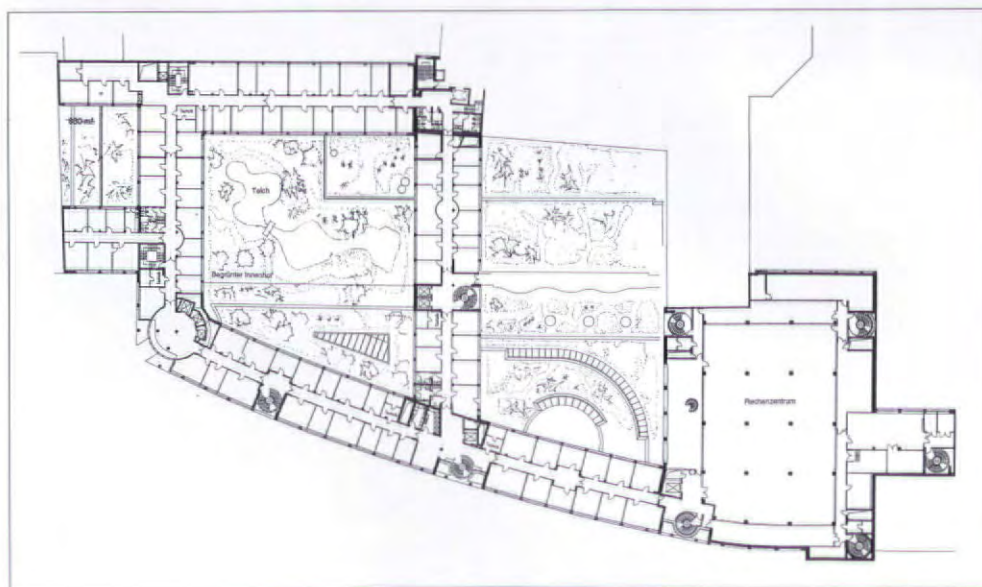
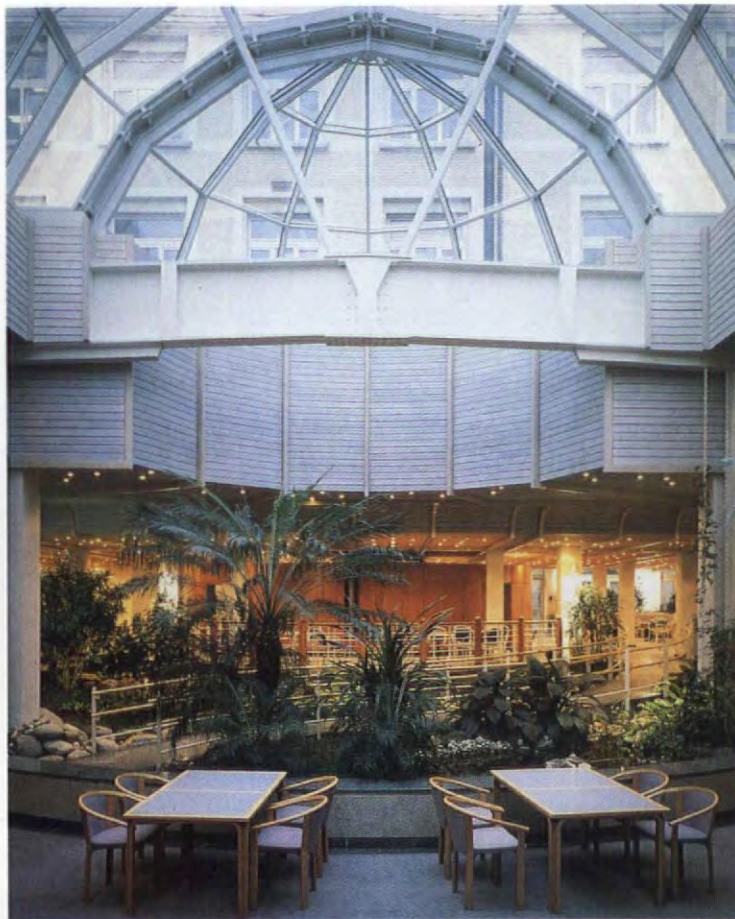
Solution: Like Höger's famous Chilehaus (itself the subject of a WGK restoration) the building's ship-like appearance is a conscious echo of Hamburg's maritime tradition. Deck, hull and superstructure can all be made out within the building's overall form, while funnel-like cylindrical glazed stair/lift towers articulate the main facade, the most prominent of them – sitting atop the building's "prow" – topped by a circular glazed conference room. Inside, the building accommodates a multiplicity of functions, including a large custom-designed computer centre and the equally large

printing office needed to do justice to the extensive correspondence the company has to maintain with policy-holders. The ground floor is centred around a spectacular landscaped canteen. At upper levels the building occupies the periphery of the site, the space within being enlivened by unusual architectural forms and landscaping using moorland flora. This reflects the building's status as an object lesson in ecological design, being entirely constructed of environmentally sound materials.

Date: 1989-1993



Opposite page Part of the 150 metre long façade enlivened by the glazed stair/lift towers. **Above** The circular conference room atop the largest of the glazed towers. **Right** The ground floor canteen serves 2,000 employees. **Below left and right** Landscaped courtyards with "feature" walkway between new and existing buildings. **Bottom left** Typical floor plan. **Bottom right** Rooftop view towards main entrance tower





Above Main entrance facade showing use of local brick.
Below Site plan

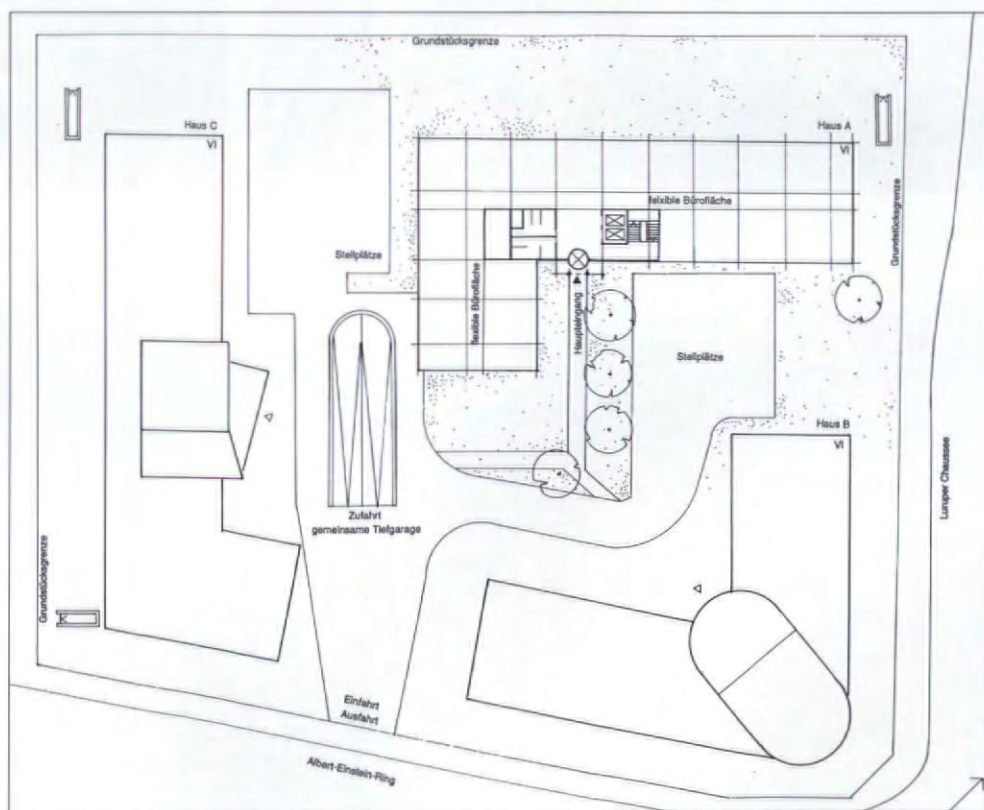
Offices for Delta Lloyd/Amsterdam on Luruper Hauptstrasse, Hamburg (Hamburger Innovations Park)

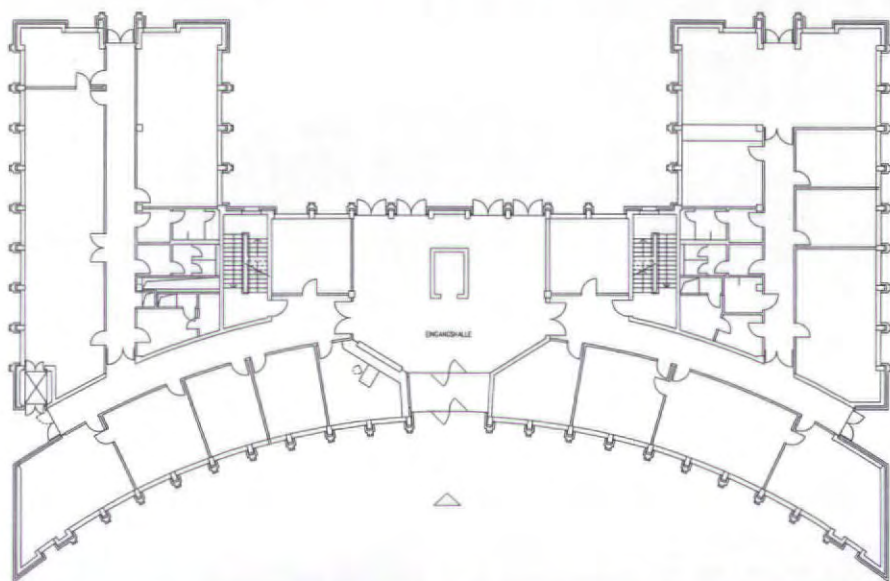
Brief: Administrative building for an insurance company.

Challenge: WGK and two other firms of architects were each commissioned to design one building in a development consisting of three new buildings, grouped around a courtyard.

Solution: WGK invested their building with an individual identity while sharing certain common characteristics – such as height, use of local brick and window type – with the other buildings in the group.

Date: 1991-1993





Offices for Deutscher Beamtenbund, Bonn

Brief: Administration building for Germany's civil servants' association.

Challenge: First mooted in the early 1980s, before it was known that the capital would be moving to Berlin, the offices were expected to be formal to befit the building's official status yet flexible enough to be easily lettable later.

Solution: The main brick facade curves gently around the forecourt while the repeating projecting piers create a dignity that reflects the building's function, the main entrance underlining the symmetry of the design. The rear is more rectilinear in character, defining an attractive courtyard which is formal yet more intimate than the building's forecourt. On each flank corridor ends create a natural break between the front and rear halves of the building, while internally the second floor conference facilities are brightened by a pleasant curving corridor with continuous rooflighting.

Date: 1990-1993



Top The main facade projects a dignified formality. **Above left** Ground floor plan. **Far left** A sculptural fountain is the centrepiece of the more angular rear facade. **Left** A corridor curves through the building

Right The curved rear facade of the building looks inland from the harbour. **Centre right** The harbour facade echoes the style of neighbouring buildings. **Centre left** Harbour facade elevation. **Bottom left** The top floor meeting room inspired by ship interiors. **Bottom right** Ground floor plan

Offices for Grosshandels- und Lagerei BG, Hamburg

Brief: Offices for wholesale and warehouse trade association.

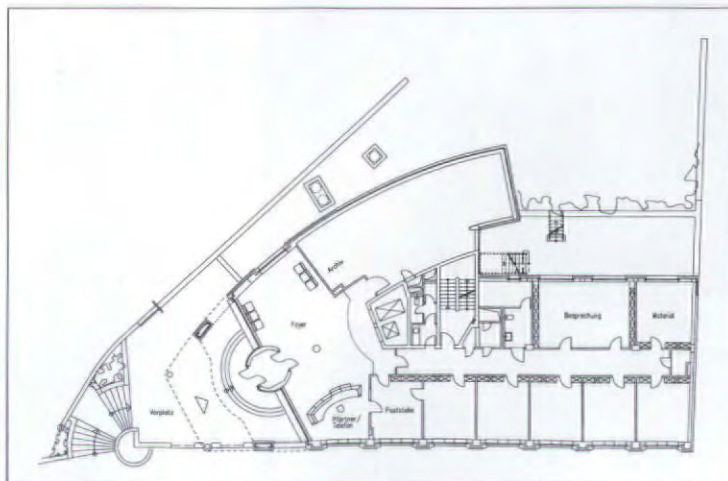
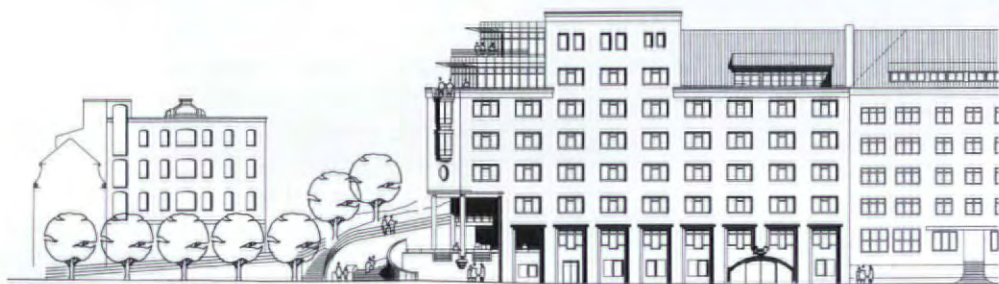
Challenge: The building occupies a site overlooking the River Elbe and Hamburg's historic harbour area, including the terminal building for ferries to England.

Solution: The building's rooftop terraces, flat-iron shape and port-hole window create evocations of a ship's prow which in view of its location is wholly appropriate. The staff canteen on the sixth floor commands impressive views of the harbour, while the nautical theme continues to the top floor conference room, inspired by the tradition of ship interiors. The main facade echoes that of the neighbouring buildings, while the spiral staircase, recessed entrance and curved bay at upper levels emphasise the relationship between the dock area on one side and the hill on the other. Details in structural steel, exposed at various strategic points on the building facade, extend a language established by the arched steel flood-control doors at ground floor level (the river is only 25 metres away).

Date: 1988-1992



Photographs on this page by Cordelia Ewerth





Above The brick-faced block of individual offices contrasts with the curtain-walled block containing open plan space.
Below left Ground floor plan. **Below right** Circular windows create a nautical feel

Harbour Offices for Gesamthafenbetriebs-Gesellschaft mbH, Hamburg

Brief: Offices for harbour administration.

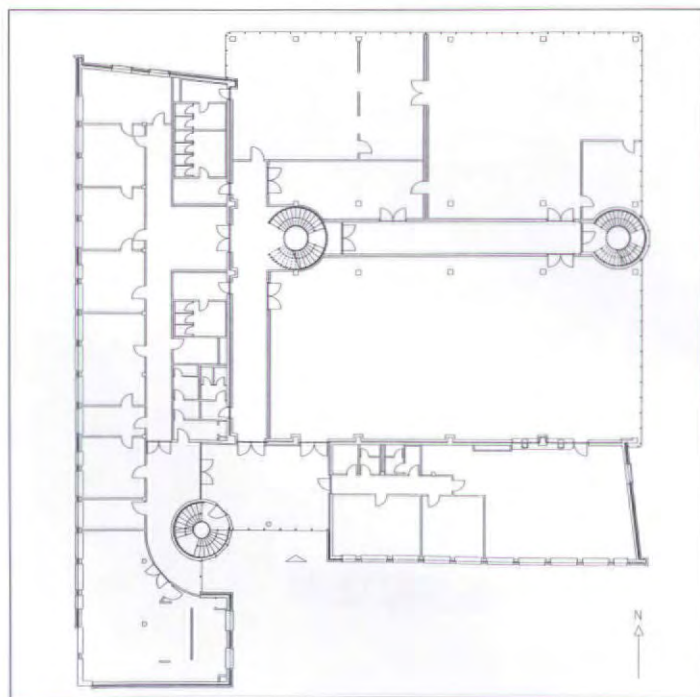
Challenge: The building has two functions: administration of the company itself and allocation of dockers to different ships. Therefore, in addition to offices, the building had to provide a large hall on the ground floor in which dockers could congregate. It also had to be erected within one year and find a form

relating the traditional harbour aesthetic to more modern demands.

Solution: Two brick-faced blocks containing individual offices are in marked contrast to a curtain-walled block containing the dockers' assembly hall. Cylindrical staircase towers with inclined roofs projecting above the main roof make up a third element in the composition.

Choice of material is not just determined programmatically but also by the need to minimise solar gain during the working day. The brick wings recall Hamburg's traditional harbour materials, while the curtain wall facades are animated by reflections of clouds scudding across the sky, above a reflection of the harbour.

Date: 1991-1992





Photographs on this page by Cordelia Ewerth

Offices for Delta Lloyd/Amsterdam on Pappelallee, Hamburg

Brief: Administrative building for an insurance company.

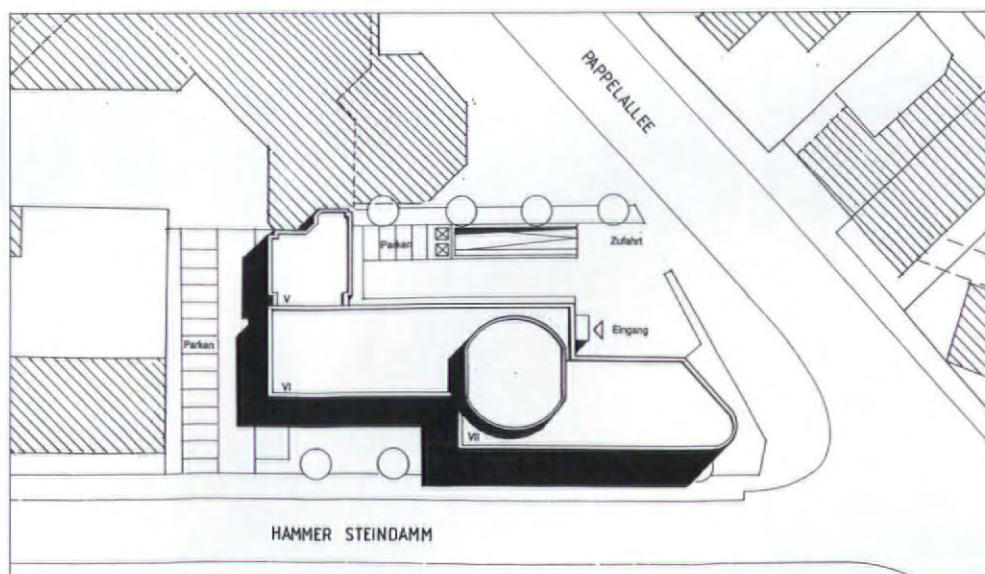
Challenge: The site lies in an area already well-populated with office buildings. Building lines and planning conditions were strict.

Solution: The functional division of the building's interior was not yet defined at the

design stage, so the architectural language was derived from the planning conditions. In this respect the articulation and emphasis of the building corner was a prime consideration. Meanwhile, the interior was designed to be as flexible as possible to allow for the uncertainty.

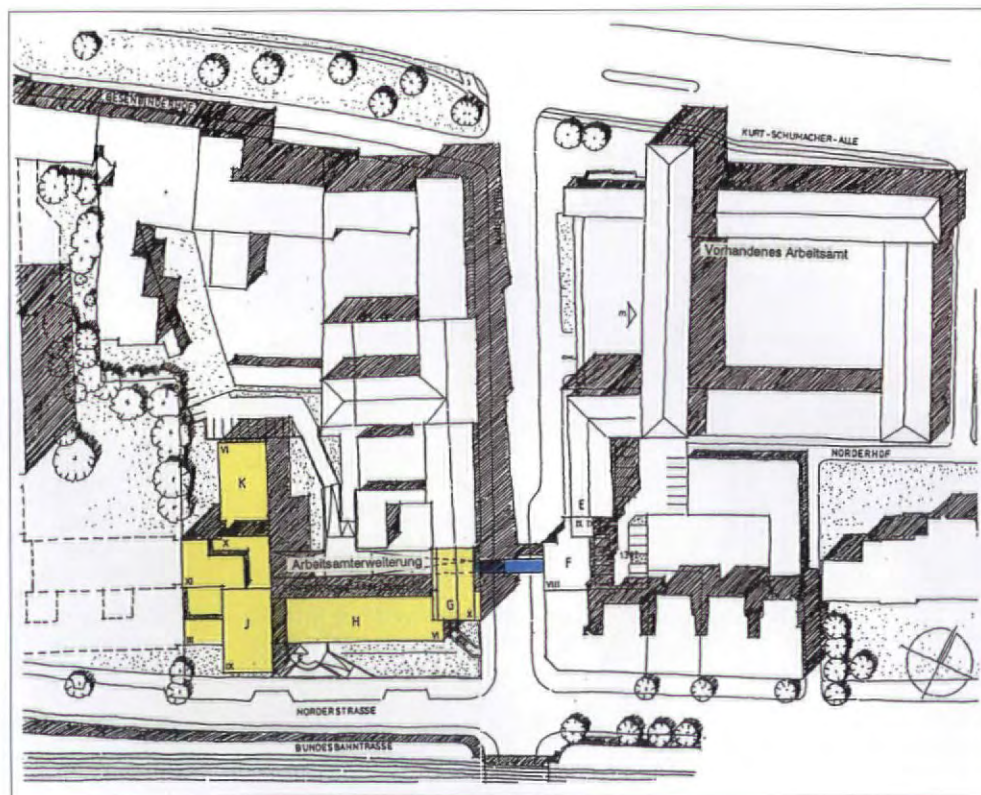
Date: 1989-1991

Above The building's very individual character was achieved despite strict planning controls. **Below** Turning the corner of the site was an important design consideration. **Below right** Block plan





Above In order to retain human scale and to conform to its site, the building was designed as several individual blocks. **Below** Site plan showing relationship to surrounding area



Employment Office and Job Centre in Hamburg for Bundesanstalt für Arbeit/Nürnberg

Brief: Extension to existing labour exchange across road.

Challenge: Retaining clarity and a human scale within a 23,000 square metre development on a contorted site with a tight planning brief. Room sizes had to conform to strict guidelines.

Solution: The building was broken up into individual blocks, creating a positive relationship with adjacent properties. The light, airy interior minimises institutional connotations and is conceived in terms of a modern city centre hotel, while externally the Finnish granite facing echoes the brick colour prevailing in the neighbourhood. The building features a transportable information system that was specially developed.

Date: 1985-1988



Above BHW I; landscaping was important from the outset.
Below Isometric sketch. **Bottom left** Block plan. **Bottom right** South elevation of the complex showing the new central entrance

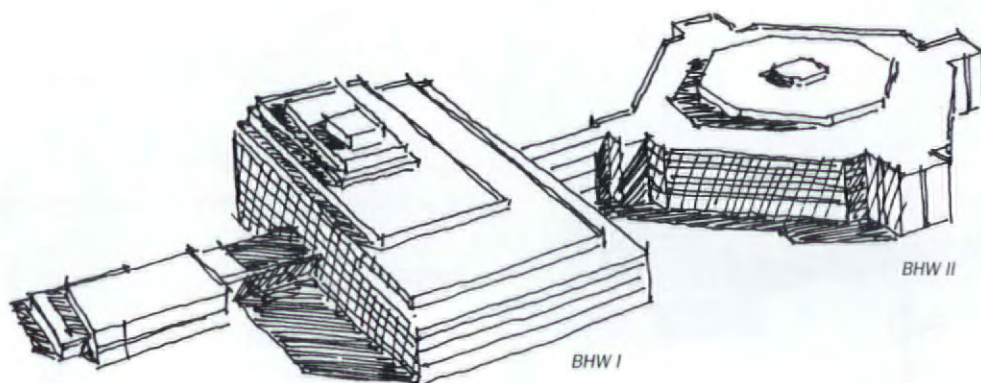
BHW I / BHW II: Offices, Hameln for BHW-Bausparkasse

Brief: Offices for a building and loan association in two phases.

Challenge: Integration of the new building into an edge of town site (phase I); ensuring optimal circulation with existing building (phase II).

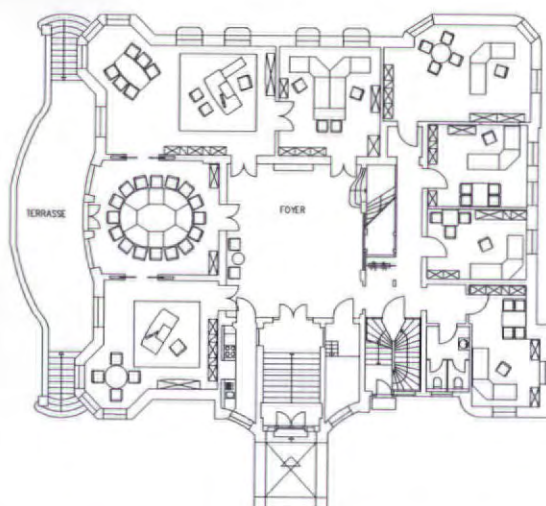
Solution: BHW I resulted from a competition in 1966, in which WGK won first prize and the opportunity to realise their design. These offices have since then been brought up to the highest contemporary standards in terms of desking, computer and environmental services. The close attention paid in Phase I to landscaping and the relationship of the building to local topography has been maintained in Phase II, which encompasses a linked but formally separate 26,000 square metre office building and a new combined entrance affording direct access to both buildings.

Date: 1966/1978/1994 – (modernisation still in progress)





Left The exterior was unaltered. **Below left** Section. **Below right** Ground floor plan. **Bottom clockwise from left** Meeting room with table top built around the glazed ceiling panel of the hall below; looking up at the glazed panel and restored decoration; restored interior showing sympathetic use of modern furniture



Villa Restoration, Dresden-Blasewitz for Saechsischer Landkreistag

Brief: Restoration and redesign of turn-of-the-century villa to provide new county council offices.

Challenge: The conversion of this listed building had to provide functional council offices without compromising the building's architectural character, a mixture of styles from Jugendstil to Baroque and "Rosenkavalier Rococo".

Solution: The building's run-down facade was completely restored using the original plans and in the original architectural styles. Meanwhile parts of the interior were painstakingly restored, whilst others were radically redesigned. Particular care was taken in the sensitive integration of a modern technological innovations. Following the discovery during site investigations of original Jugendstil stencil paintings, new stencils were made and the original decorative scheme reinstated.

Date: 1993-1995

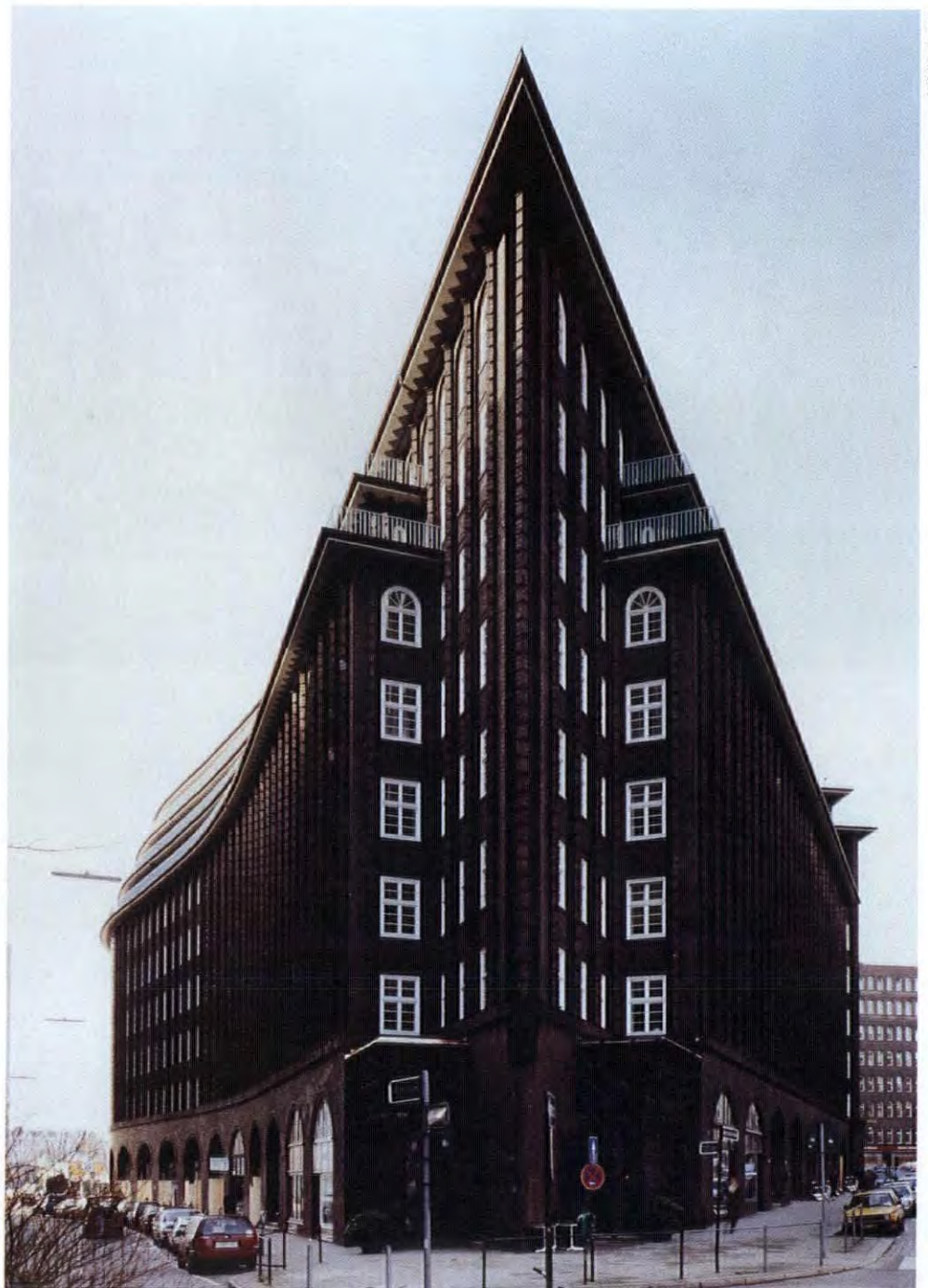
Chilehaus restoration, Hamburg for Scandinavian Partners/Sweden

Brief: Reconstruction and modernisation of Fritz Höger's pioneering Expressionist building.

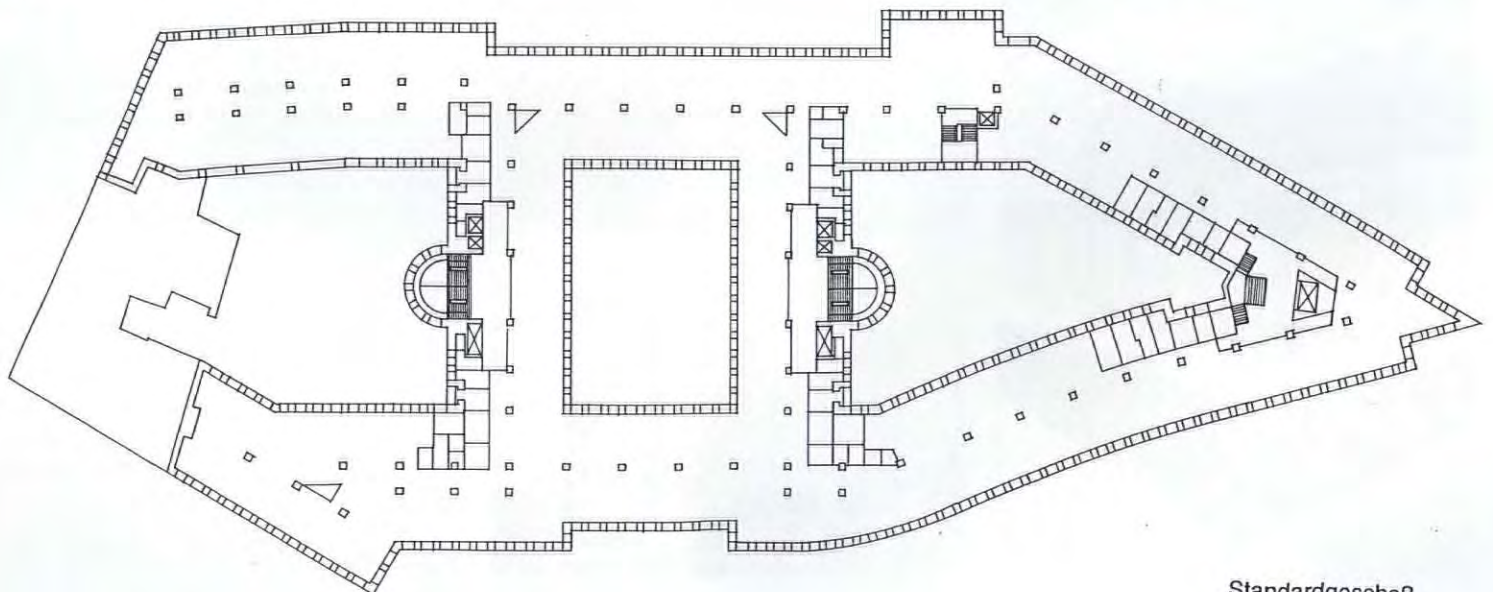
Challenge: Chilehaus is a distinguished *Kontorhaus* (multi-storey offices with flexible partitions) built 1922-1924 for Henry Barends Sloman, an importer of Chilean saltpetre. Amongst other things it is celebrated for its ingenious use of brickwork. At the time of writing UNESCO intend to list the Chilehaus as one of the most important buildings in its world heritage register. Unfortunately its artistic status was not reflected in the level of maintenance it received, and by 1990 it was in severe need of refurbishment. Its enormous floor area and city centre location attracted the interest of a Swedish developer, who fortunately recognised the importance of a sensitive restoration.

Solution: WGK's refurbishment provides the building with fully up-to-date office facilities while retaining all the most important features of the exterior and internal circulation areas. The facade has been restored to be true to its original condition while internally the building's nature as effectively a "shell and core" development ahead of its time meant that the office areas themselves could be gutted without affecting the building's essential character. By contrast the staircases were restored and modern lifts installed with decorative features designed to refer to the building's famous "ship's prow" corner. The strategy for internal fitting-out varied according to tenant and location. In spite of the row of central columns on each floor, central corridors were accommodated by widening them at each column, creating a soft elliptical form in both the walls and the floor. Thanks to WGK's ingenuity, what had been a problem became a positive feature. Externally a floodlighting scheme was developed to underline its nautical character.

Date: 1990-1994



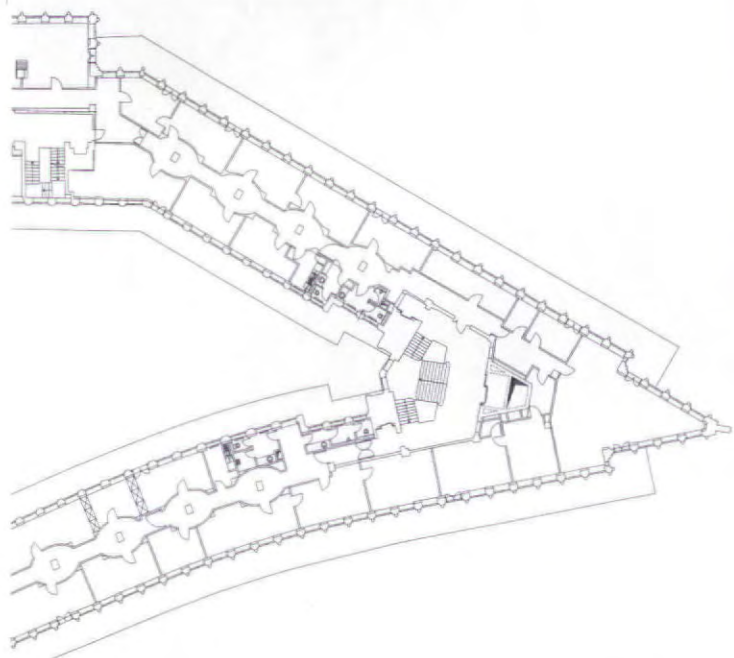
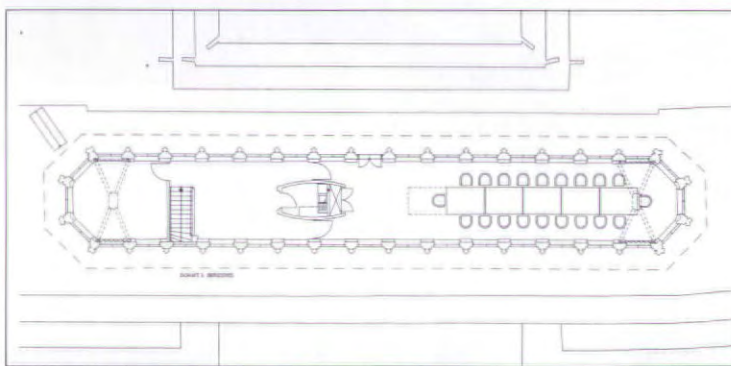
Above Every effort was made to retain the most important features of the exterior. **Below** Typical floor plan



Standardgeschoß



Above Sixth floor meeting room. **Above right** The ninth floor "Zeppelin" conference room with **right** its anteroom and kitchen facilities and **below right** the floor plan for the whole suite. **Below** Sixth floor plan. **Bottom left** Exterior detail. **Bottom centre** Newly designed ground floor retail centre. **Bottom right** One of the "bays" in the sixth floor corridor





Passenger transfer system at Gate B, Frankfurt/Main Airport

Brief: Magnetic suspension railway with stations, connections, passenger lounges and shopping areas.

Challenge: A steep rise in passenger numbers necessitated an expansion of the existing terminal. A new passenger transfer system formed an integral part of these plans. It was important that sound penetration and radar reflection both be minimised; fire protection and security regulations were also critical factors. Normal use of the terminals – and, not least, the normal security barrier between domestic and international passenger zones – had to be maintained throughout the construction process.

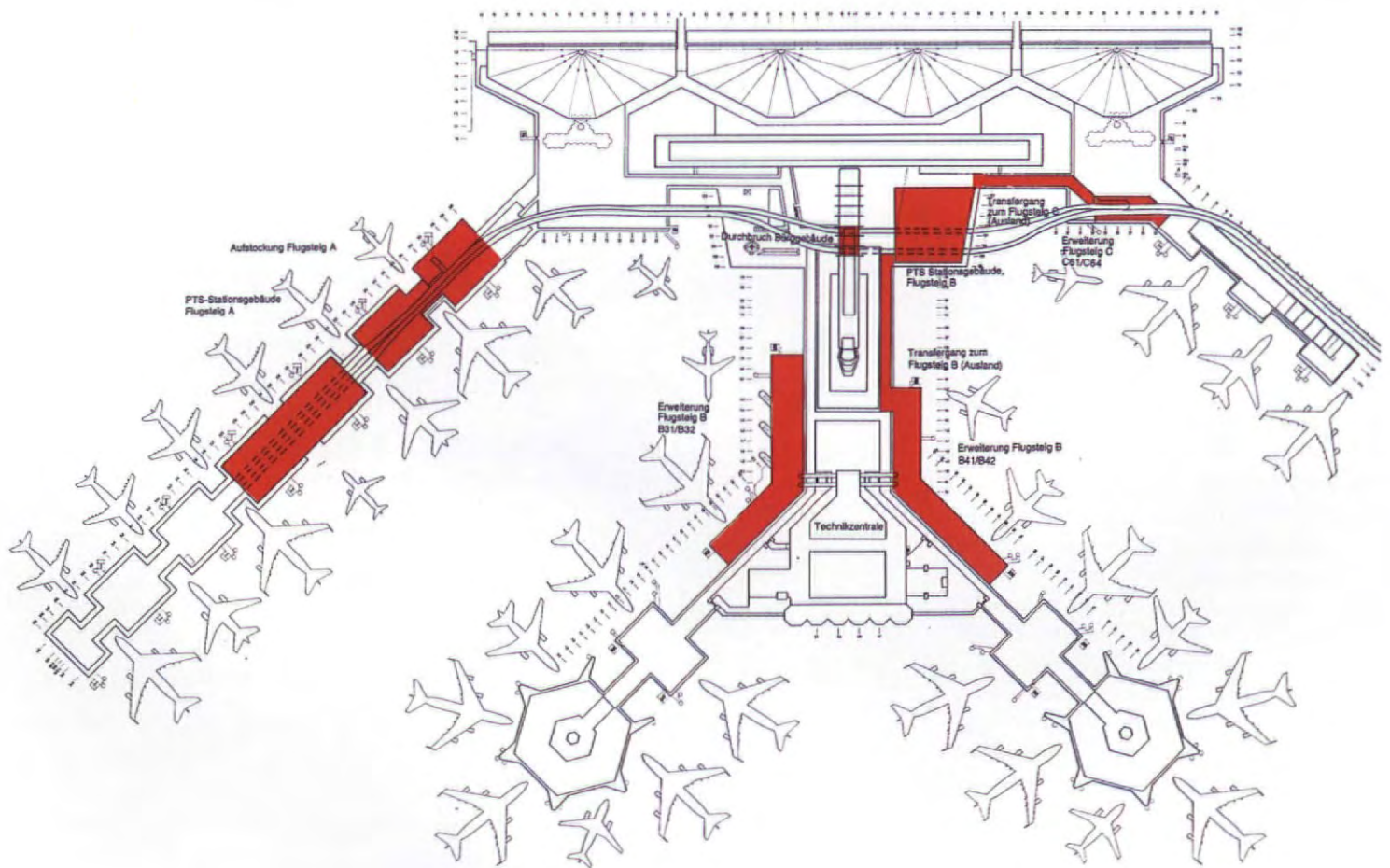
Solution: Trains in the new system are driverless and run through glazed tunnels in the stations; appropriately, therefore, the architectural aspects of the system are designed with the utmost transparency in mind, while the concourse roof supports are in visually lightweight steel. The problems presented by having to weave a new transit system over and through an existing building complex without disrupting existing functions or allowing breaches in security are self-evident: for

instance, in order for the new line to reach Gate A, Air Traffic Control had to lose part of two floors where the new lines would pass through the building. However, the relevant organisational and architectural implications were elegantly resolved by WGK.

Date: 1992-1994

Above Frankfurt PTS station. Steelwork is reminiscent of classic railway architecture. *Below and opposite page top left* The railway had to integrate with existing airport buildings. *Opposite top right* A high level of transparency was achieved throughout the system. *Opposite centre left* New shopping facilities were established. *Opposite centre right* Boarding gate passenger lounge. *Opposite bottom* Site plan showing areas that were developed







Extension to Gate B 11-16, Frankfurt/Main Airport

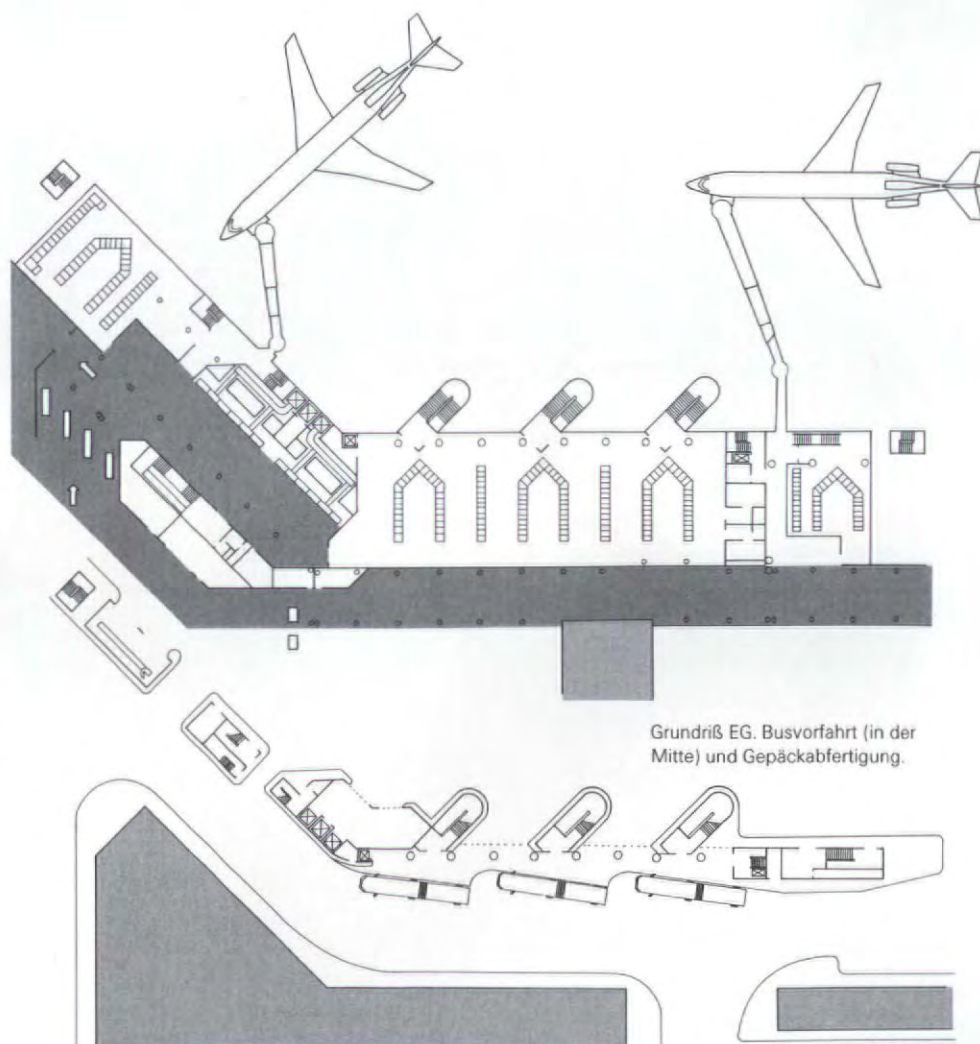
Brief: Enlargement of aeroplane boarding/arrival gate to accommodate major expansion in passenger traffic.

Challenge: Airport expansion is an international phenomenon. Already by 1988, Frankfurt/Main had reached a throughput of 25 million passengers per annum – a level previously forecast for the year 2000. Extension had to be closely integrated with the airport's functional and circulation systems, while the construction work could not be allowed to disrupt existing traffic. With Boeing 747s producing a sound output of 108 dB the need for sound insulation and absorption is clear enough. Many of the same conditions existed as in the construction of the PTS (see previous pages): the functioning of the terminal and security barriers between domestic and international passenger zones had to be maintained throughout.

Solution: The new extension nestles beside a kink in the existing plan. A *Sammelgate*, or collective gate, allows six flights to be despatched simultaneously, involving the processing of over 1,000 passengers in short order. The facade is fully glazed, its most noticeable feature being three projecting staircases in oblique formation. Sound insulation is provided by means of quadruple glazing which, including air gaps, is almost five centimetres thick. Anti-reflective glass was used to minimise distractions for pilots.

Date: 1987-1988

Above The fully glazed structure fits into an angle in the existing airport building. **Below** First floor (gantry access) and ground floor (bus access) plans



Grundriß EG. Busvorfahrt (in der Mitte) und Gepäckabfertigung.



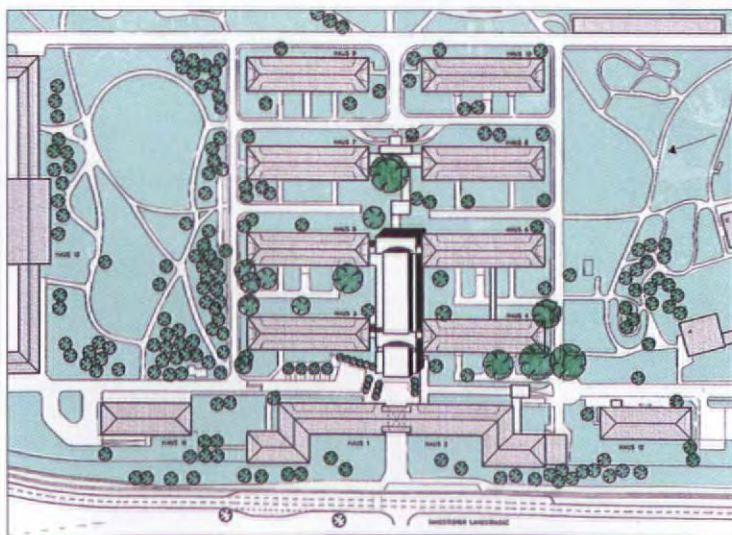
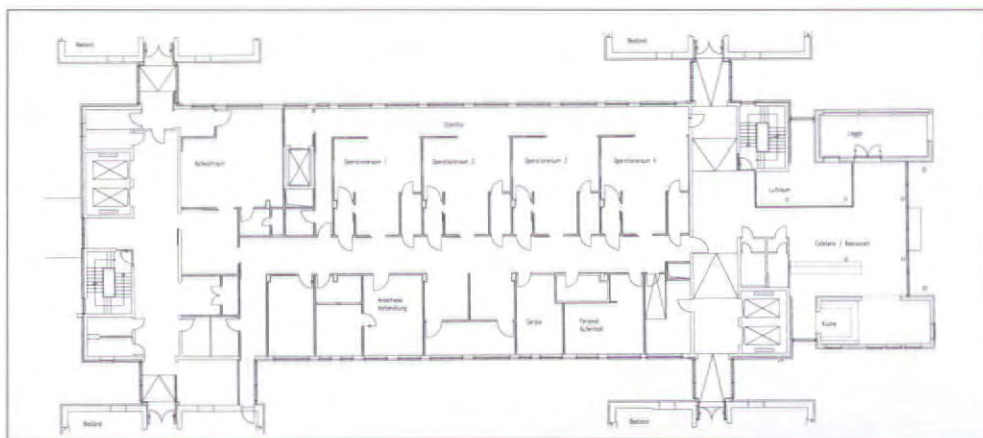
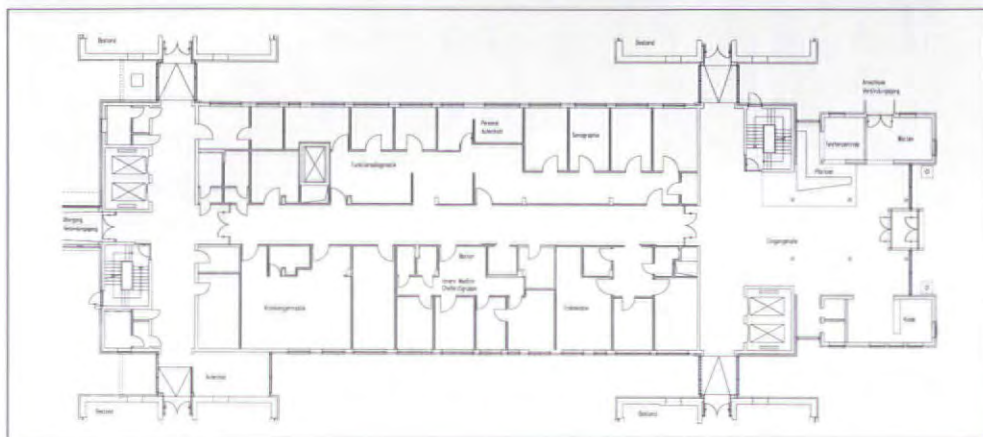
**Heidelberg General Hospital
for Freie und Hansestadt Hamburg**

Brief: Refurbishment, reorganisation and new building of a hospital in the Hamburg suburbs.

Challenge: The hospital was formed after the war out of a former barracks complex, now under preservation order. The separateness of the buildings means that patients must be wheeled in their beds through the open air between wards, diagnostic areas, operating theatres and radiology department. WGK had to design a sheltered circulation system between these functional areas, together with new central service facilities.

Solution: Hospitals everywhere are well-known for their need for constant change and development – a situation made more difficult when the buildings they occupy are subject to a preservation order. W GK's solution is to maintain a clear distinction between old and new. The delicacy of the hospital's new service building is in marked contrast to the monumentality of the existing buildings. Inserted in the gap between the existing buildings (which are being restored and renovated) it creates a main entrance and a focal point where none previously existed. This, together with pedestrian passages above and below ground and a vehicular ring road are expected to eliminate the hospital's current logistical problems.

Date: 1995-1998





Administration Building and Occupational Medicine Centre, Greifswald for Bau-Berufsgenossenschaft Hamburg

Brief: Office building with preventive centre for occupational medicine for construction workers, and workers' training courses in accident prevention.

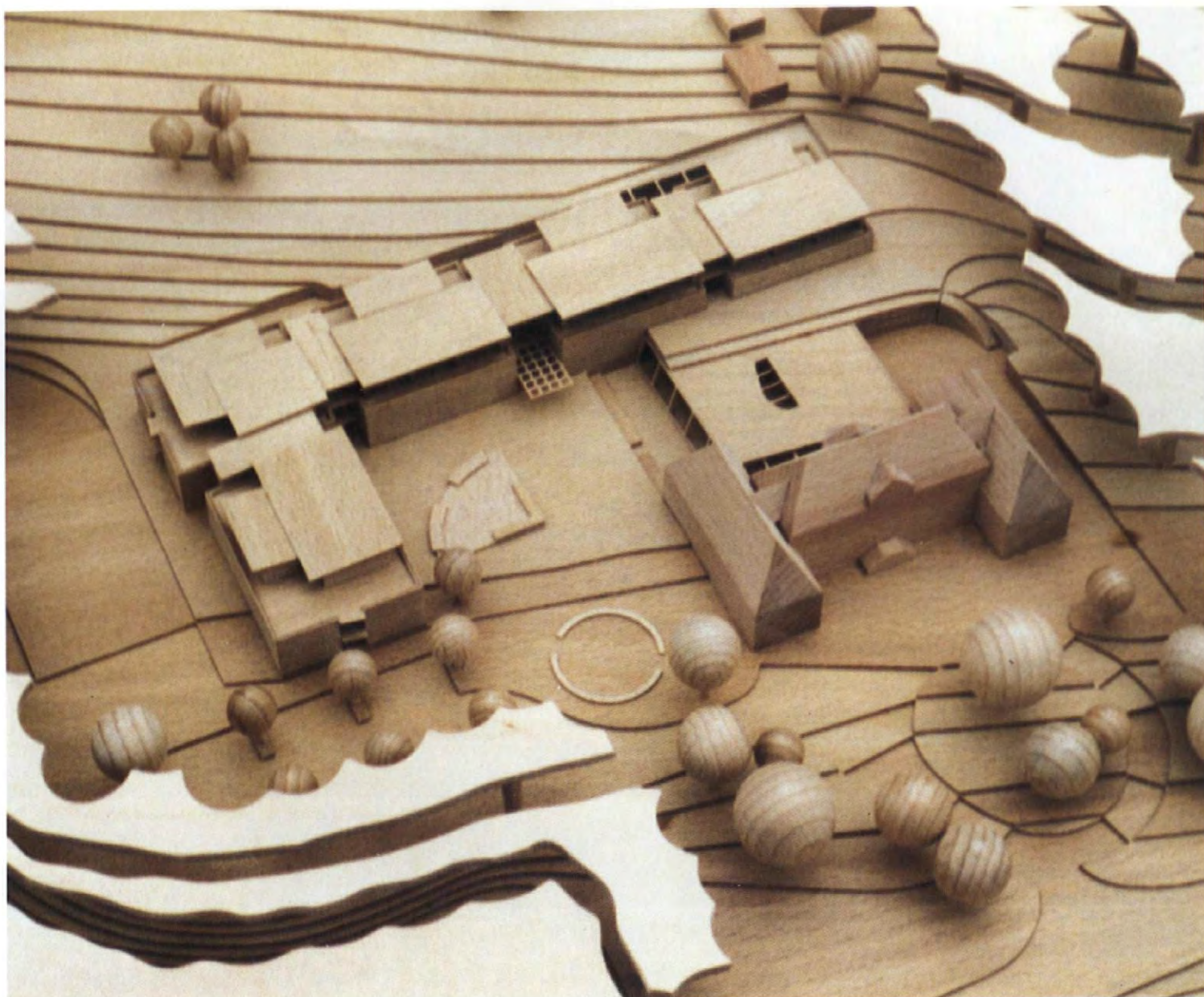
Challenge: Development of the themes already established in WGK's centre in Neumünster.

Solution: The Greifswald centre is intended as a model design for other such centres planned in Neubrandenburg, Rostock, Schwerin, Flensburg and Lübeck. The building sits on a square base, with three floors including a set-back roof storey. On the ground floor are the registration desk and occupational medicine, on the first floor the technical care and training area, and on the second are physiotherapy, a display area and an apartment. A partial gallery over the open staircase helps to create a sense of unity.

Date: 1993-1996

Top Exterior view with canopied entrance. **Above** Plans, from left to right, ground floor, first floor, second floor. **Below** Ground floor reception area





Above Model showing older, protected building linked to the new clinic by a single storey connecting building which is part buried in the hillside. **Below** Section through original structure, connecting building and new clinic

Clinic in Putbus, Isle of Rügen (competition/design purchased)

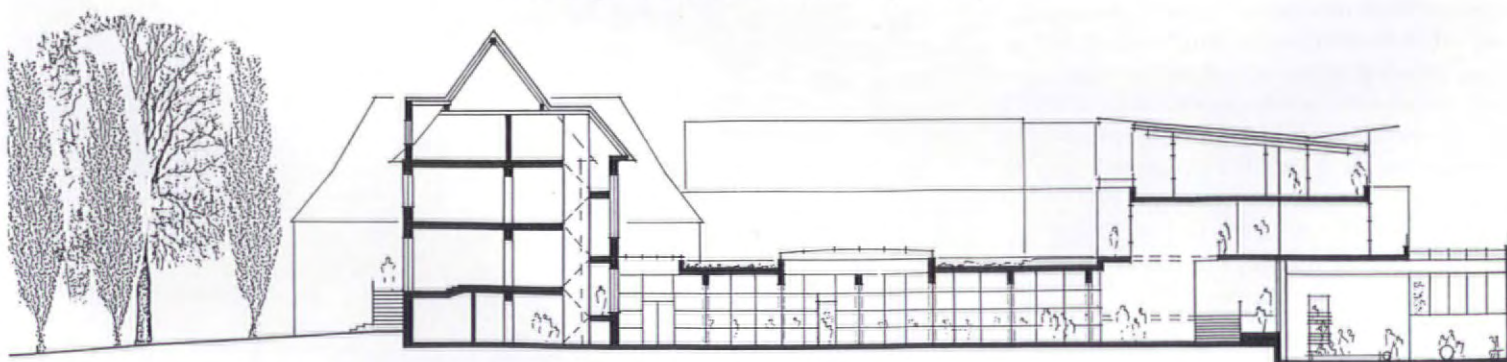
Brief: Children's clinic incorporating a building under a protection order in Putbus.

Challenge: The site, which rises several metres to the north-west, is set in parkland and was therefore extremely sensitive.

Solution: The topography is exploited to set the building into the site, thus minimising the scale

and reducing its impact on the existing villa. Between the wings of the old building a single storey connecting building with dining room, swimming pool and sports hall, buries itself in the slope and ultimately disappears. Only at a decent distance from the villa do all three floors of the new building appear undisguised.

Date: 1996





Photographs on these pages by CTD Fotostudio

**Wingertsberg Care Clinic
for Bundesversicherungsanstalt für
Angestellte/Berlin**

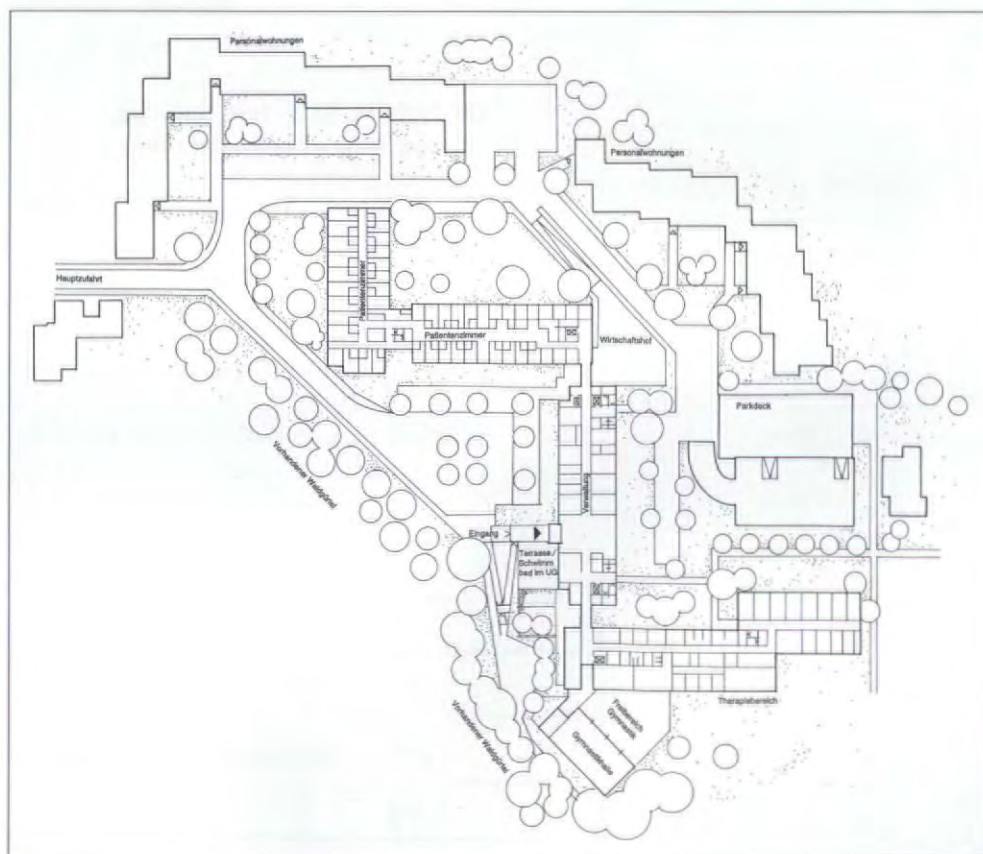
Brief: Refurbishment and modernisation of a 230-bed clinic originally built in the 1970s.

Challenge: Wingertsberg Care Clinic specialises in gastrointestinal and heart diseases, metabolic disorders, and psycho-vegetative syndrome. The key requirement therefore was to balance the requirement to meet increased technical demands with the preservation and enhancement of the building's friendly and accessible atmosphere.

Solution: WGK placed the healing of patients at the heart of its design. This begins in the smallest unit, the patient rooms, which are provided with a range of different equipment to allow maximum versatility (dressing facilities for the disabled, connections for intensive supervision, reserve bed for carers and so on). Common areas, including gymnastics hall and swimming pool, were also completely modernised to create an environment that is friendly and full of light. Steel structures in the window area, sun-shading and balcony planting provide colourful new accents. Internally, special emphasis was placed on the selection of materials and colours for patient rooms and circulation areas.

Date: 1989-1995

Above Originally built in the 1970s, the hospital was in need of both interior and exterior refurbishment and modernisation. *Below* Site plan





Above left and right The exterior was improved by the addition of steel structures to the windows, colourful sunshading and a programme of planting

Facilities were improved throughout the hospital. Clockwise from below Patient's room; restaurant; swimming pool; sports hall





Above left Aerial view of the hospital site. **Above** Entrance block with cafeteria in foreground. **Below** Site plan

Accident Hospital, Hamburg-Boberg for Berufsgenossenschaftlicher Verein für Heilbehandlung eV

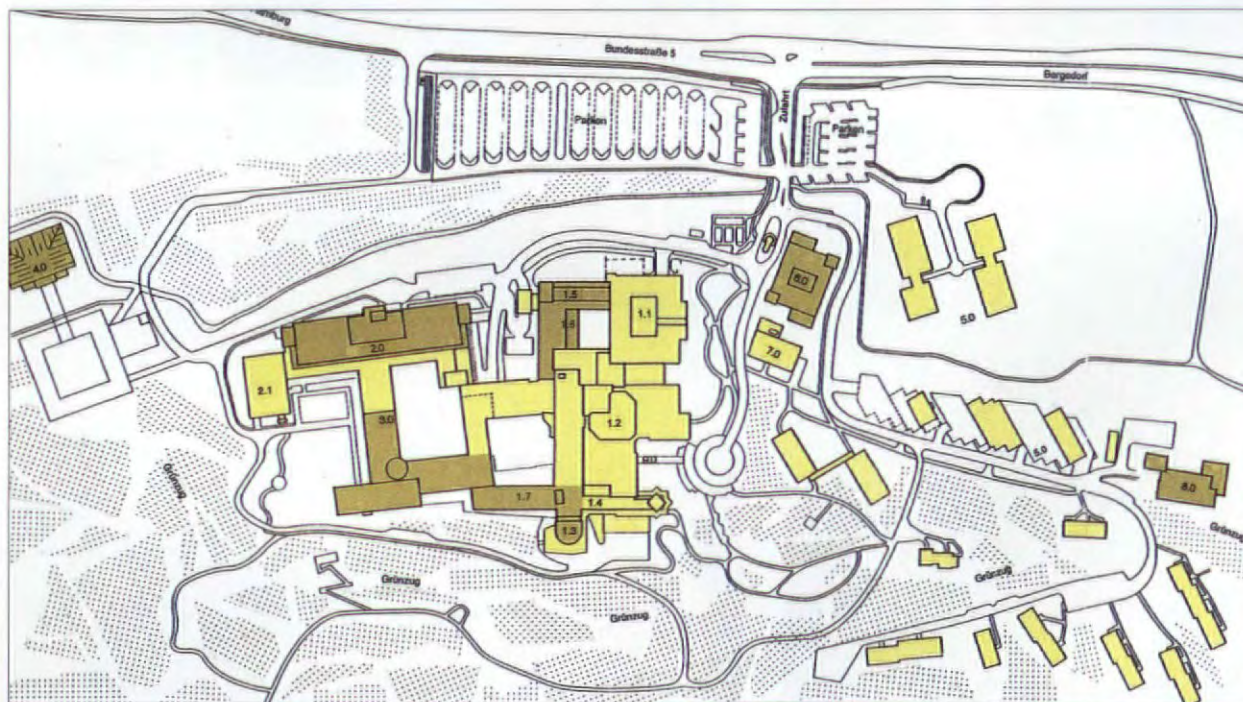
Brief: Accident hospital with special facilities for severe burns and paraplegic patients.

Challenge: WGK began its close relationship with the client in 1959 before the hospital had established its current specialist reputation. When, in the mid-1980s, it became clear that the growth in demand for the hospital's facilities could not be met by mere adaptations of the existing buildings, the client asked WGK to develop a masterplan for the hospital.

Solution: The plans formulated and realised by WGK include a three-storey treatment wing with central X-ray facilities and operating

theatres, and a six-storey ward block, increasing the hospital's capacity to 470 beds. Also part of the new construction phase were lab areas, central sterilisation facilities, urological function diagnostics and an intensive care unit for severe burns (one of the most modern such units in the world). Architecturally, a consistent design philosophy and use of materials helps to ensure that unity is maintained across the years. Architectural form itself is based upon the principle of optimal accommodation of function or – to put it more succinctly if unoriginally – “form follows function”.

Date: (Current phase) 1985–2001

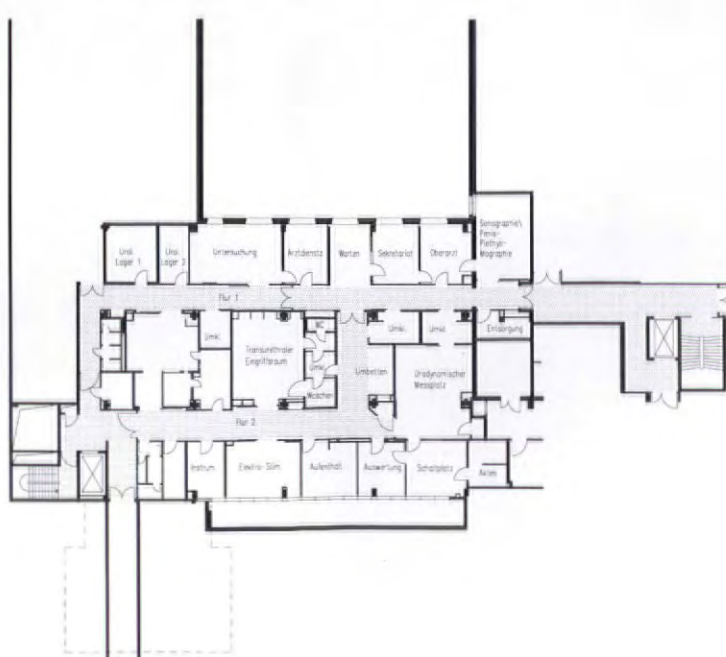
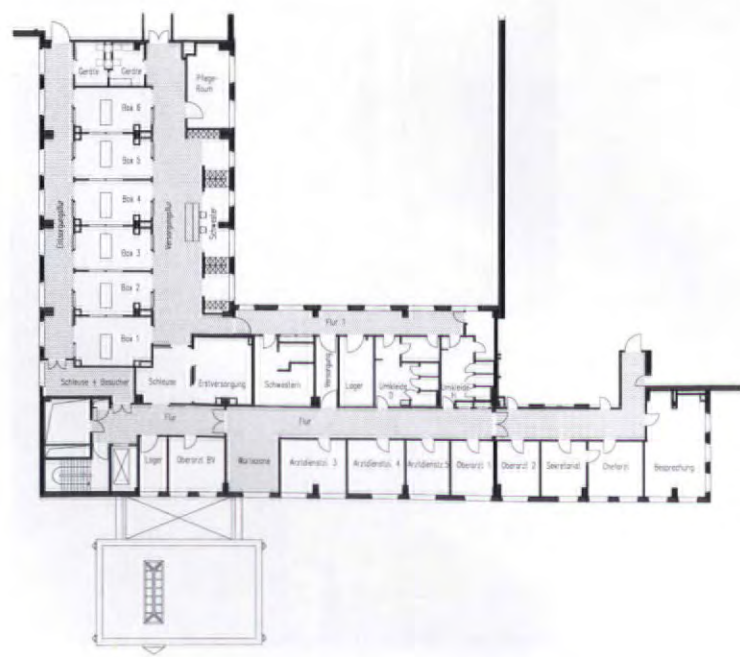


Key to site plan

- 1.1 Diagnostic and treatment
- 1.2 Wards
- 1.3 Lecture theatre
- 1.4 Cafeteria
- 1.5 Burns unit
- 1.6 Urological diagnostic facility
- 1.7 South-west wing
- 2.0 Paraplegic centre
- 2.1 Sports hall
- 3.0 Physiotherapy
- 4.0 Helicopter hangar
- 5.0 Staff accommodation
- 6.0 Administration offices
- 7.0 Boiler house
- 8.0 Kindergarten
- 9.0 Main entrance



Above from the top Two views of the main entrance and a staff accommodation block. **Above right** Intensive care unit for burns patients. This is one of the most technically advanced units in the world and one of the largest burns units in Germany. **Right** Urological diagnostic facility. **Below left** Plan of the burns unit. **Below right** Plan of the Urology unit





**Schleswig-Holstein Centre, Neumünster
for Bau-Berufsgenossenschaft Hamburg**

Brief: Centre for Occupational Diseases in a suburban location.

Challenge: The building had to fit naturally into an area with a strong regional identity without compromising its function as a medical centre.

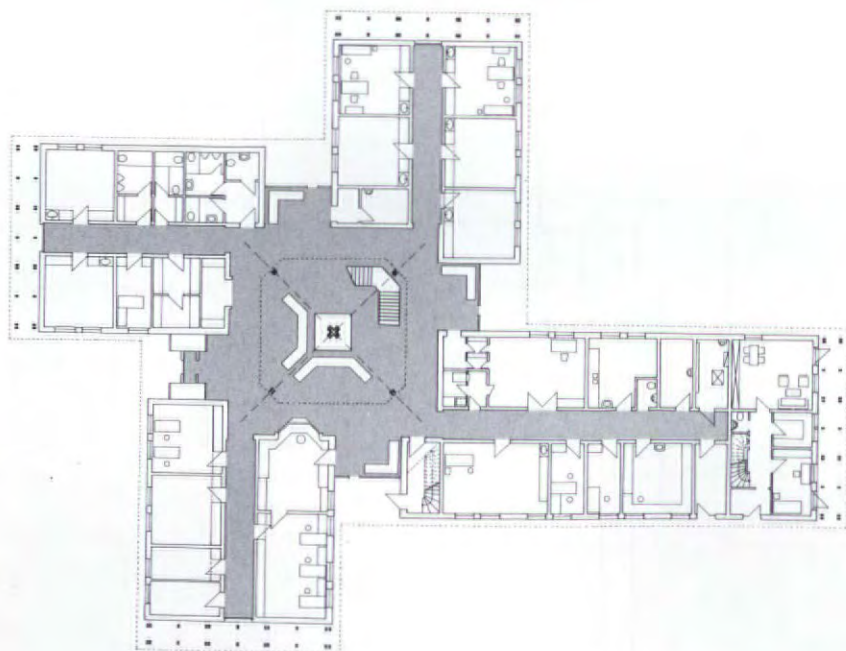
Solution: Inspiration was drawn from the *Haubarg*, a local farmhouse type with an elaborate and very visible timber structure. Outside, the roof predominates, its central pyramidal

feature emerging naturally from the junction of the four offset wings; inside, it can be seen to be supported on a spectacular timber roof structure soaring above the reception and waiting room area. From this focal space, four wide corridors radiate in the direction of the consulting and administration rooms. On the floor above, the gallery provides a display area, while in the wings are a caretaker's apartment, seminar and therapy rooms.

Date: 1987-1988

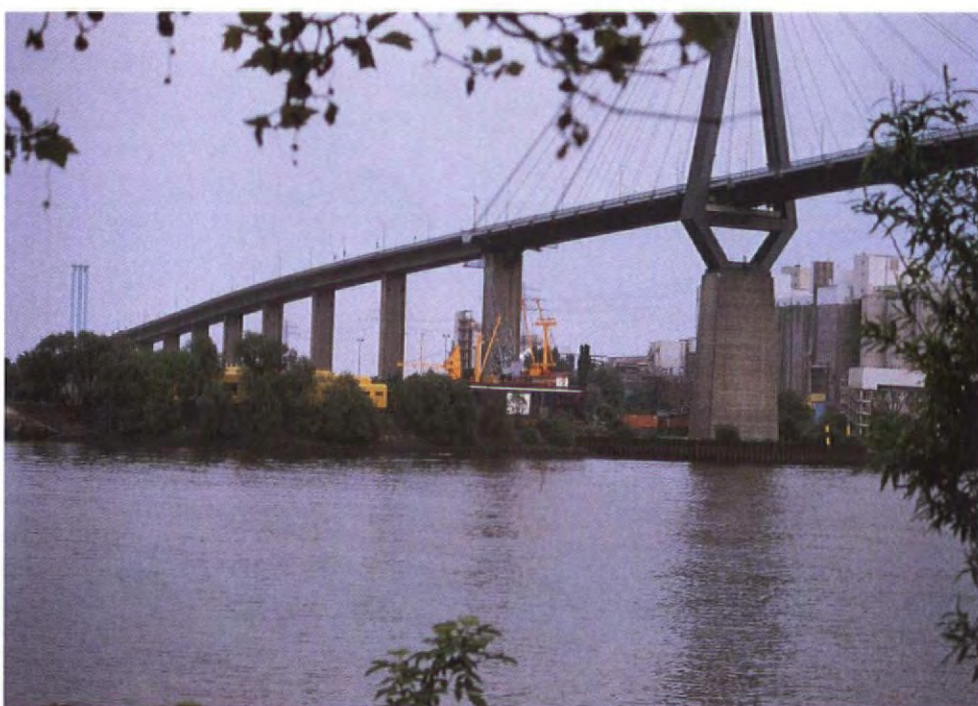
Above The building is modelled on a local farmhouse type in order to blend in with the region's architectural identity.

Below left Ground floor plan. **Below right** The spectacular timber structure supporting the central pyramidal roof





Above The training centre creates a typical dockside environment. **Above right and below** Sited beneath the Köhlbrand Bridge the office and classroom building echoes a cluster of containers. **Right** The steel "ship" sits on concrete foundations. **Bottom** West elevation



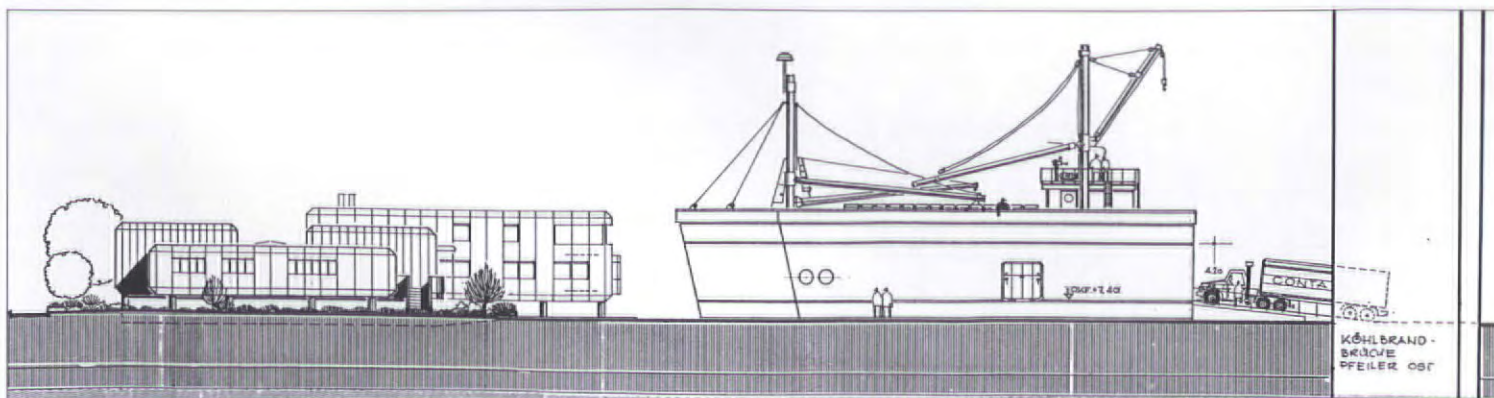
Harbour Technical College, Hamburg for Gesamthafenbetriebs-Gesellschaft

Brief: A training centre for dockyard workers (see introduction).

Challenge: Development of a convincing design for a virtually unique building type.

Solution: The school building, serving approximately 120 students, uses materials and forms associated with the harbour environment, in clusters like stacked containers, while the "ship" forms the focus of the complex. Built from steel in a shipyard, it rests on concrete foundations. Access to its interior can be gained both via a ramp from the side and by a dock crane through the deck-level hatch. Also on the site are various containers and a short length of railway line with a goods wagon.

Date: 1978-1982



**Old Barracks development
for Bernd Mursch, Hameln
(competition: 1st Prize and realisation)**

Brief: Offices and business premises on an island in the river and adjacent site.

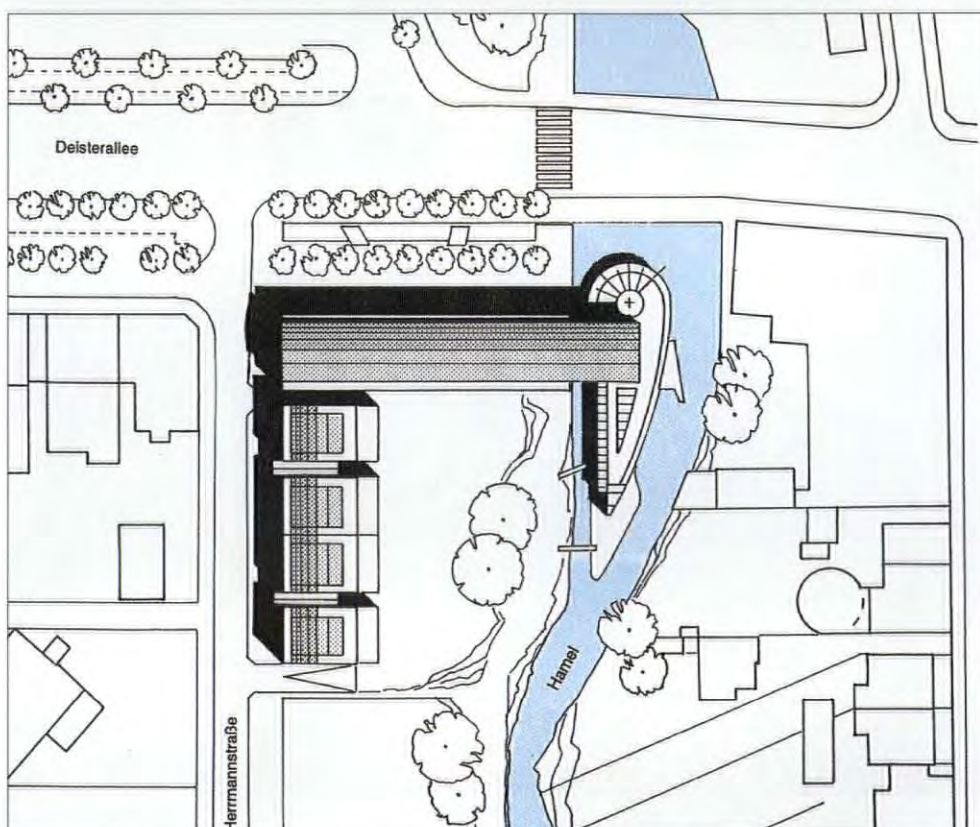
Challenge: The property lies on the edge of the inner city on an important site next to one of the main access roads leading into Hameln. Competitors had to be able to relate the various aspects of the site: the scale of adjacent buildings, the river, island and bridge.

Solution: WGK's design is set back on the site to line up with adjacent buildings on Deisterallee and to be able to continue its promenade. A courtyard is created to the south, sheltered from city noise and pollution. Maximum site development is allowed by bridging the river with the building and locating a teardrop-shaped restaurant on the island.

Date: 1993 (built 1995-1996)

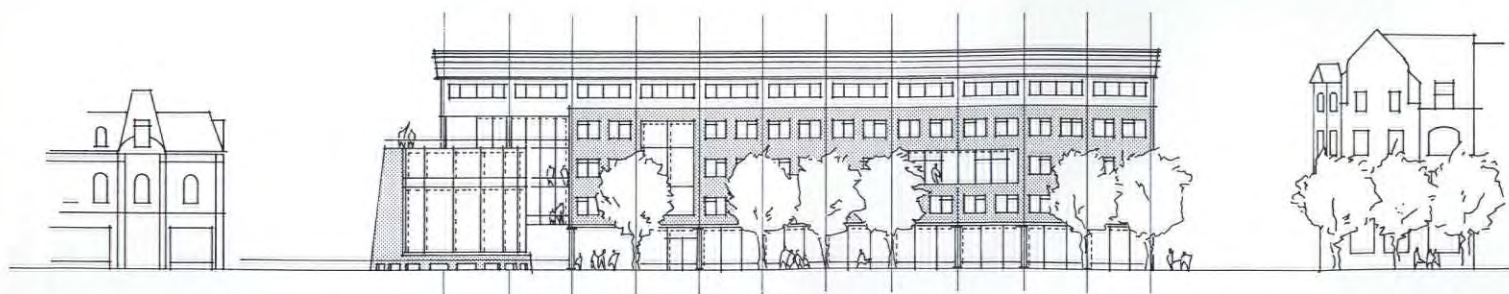


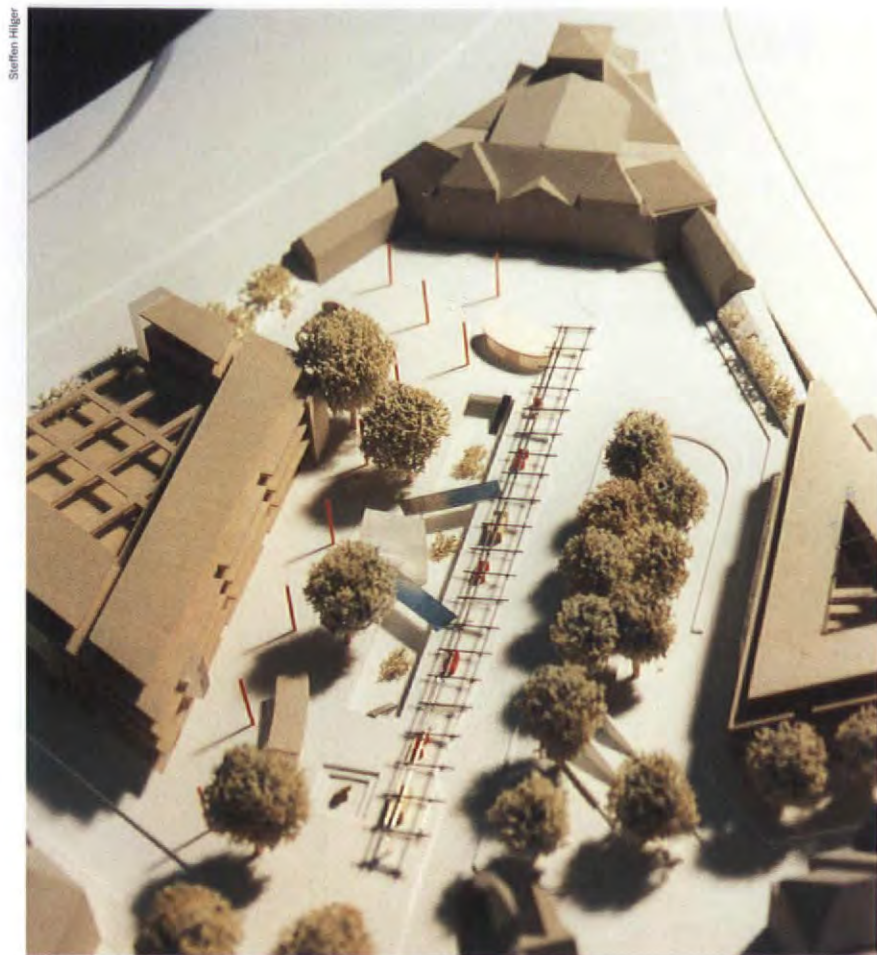
Bernd Schuster



Top right Attention to detail and different finishes produce an elegant riverside building. **Right** Maximum use of the site was made by extending the building over the river and using the island as the site for a restaurant.

Below Hermannstraße elevation





Left The Station forecourt remodelled to create a gateway to the city. **Below from top** West elevation; east elevation and section; north elevation

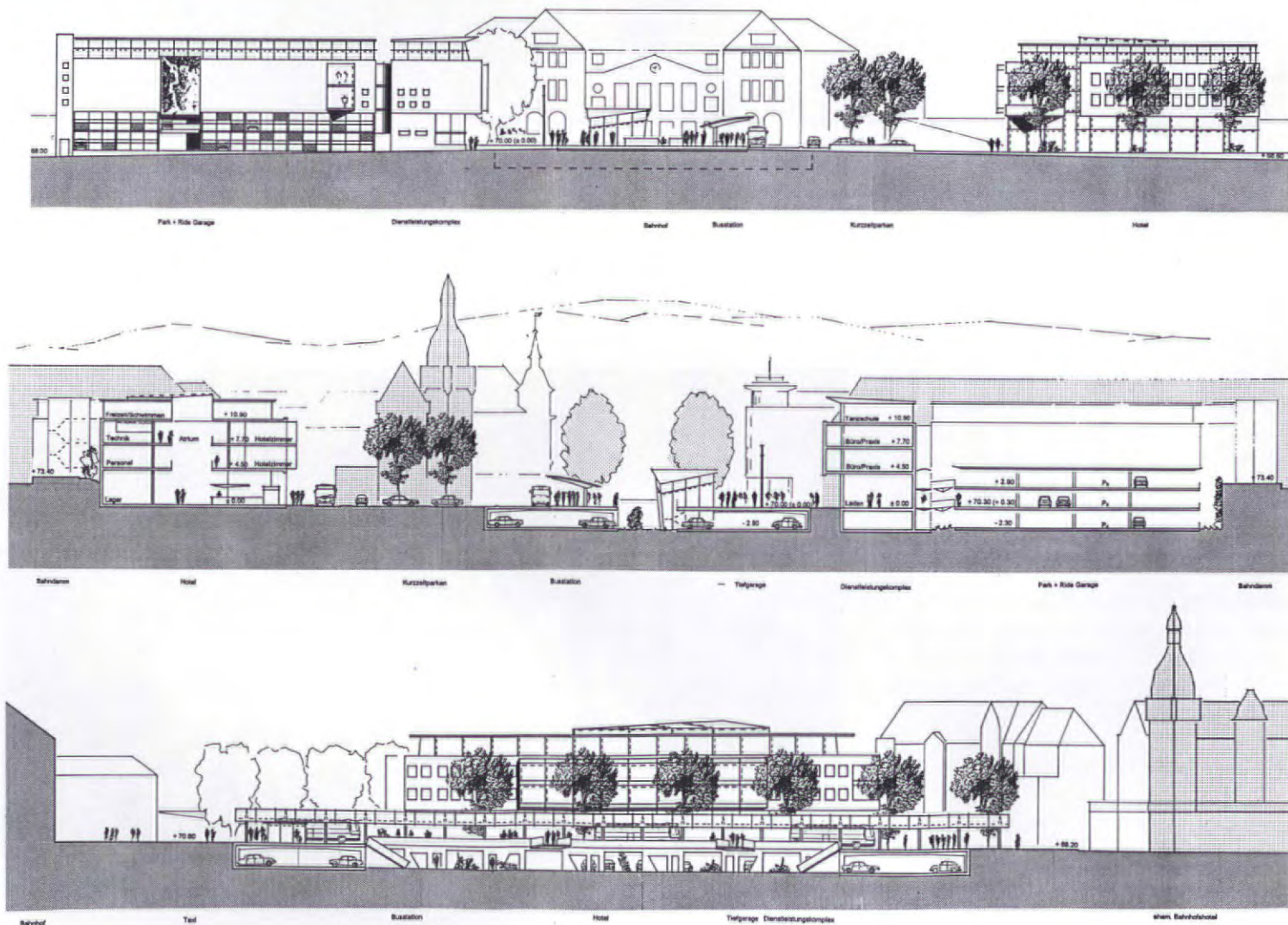
Improvements to Hameln Central Station forecourt (competition/design purchased)

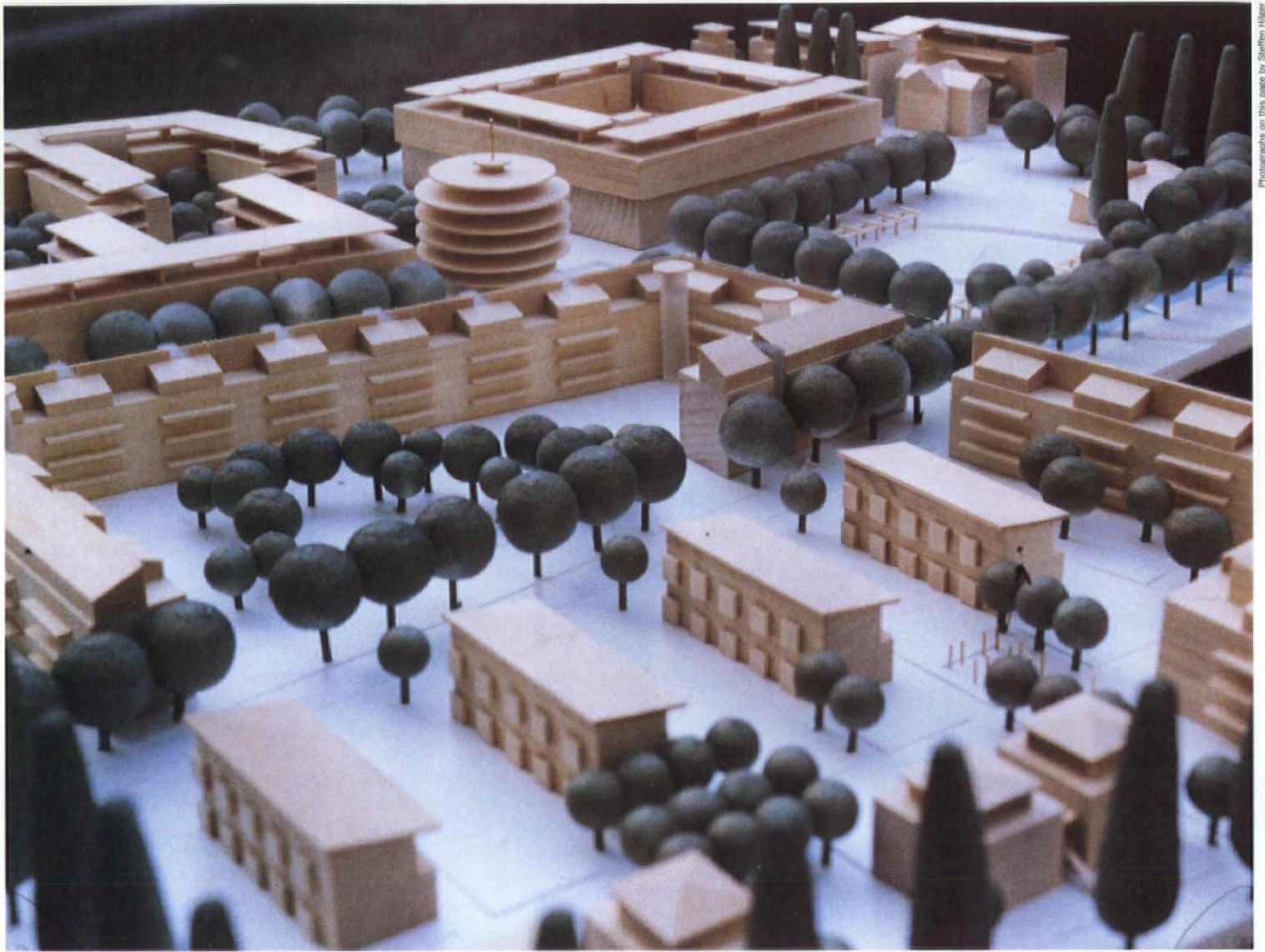
Brief: In 1994 the city of Hameln announced a competition for ideas to improve the existing run-down station forecourt.

Challenge: How to make sense of a bus station, service station, hotel and "park & ride" car park.

Solution: The strategy adopted was to treat the forecourt as a welcoming introduction to the city. A platform reinforces the axial alignment between the station and the Kaiserallee (an historic area). The separation between forecourt, station square and Kaiserallee is thereby eliminated.

Date: 1994





Photographs on this page by Steffen Heger

Above Different uses within the development were clearly defined. *Below* New buildings continue the massing of existing blocks

Mixed Development in Schwerin (competition/design purchased)

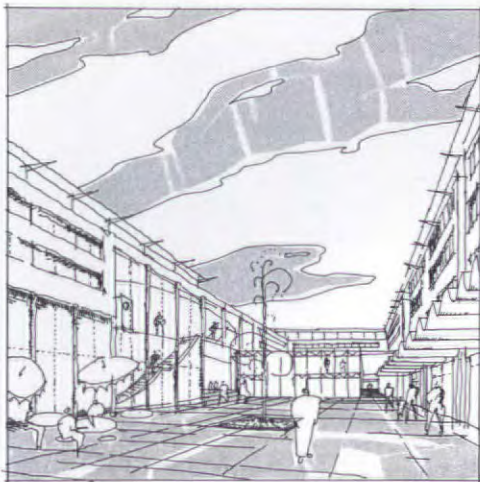
Brief: Shopping centre with offices, apartments and health centre on a former slaughter-house site in Schwerin (gross floor area 49,000 square metres).

Challenge: The site, lying directly next to Osdorfer Lake, is close to the old town and presents its southern termination. The new design had to make sense of this but also make plain the individual identity of the elements.

Solution: WGK's competition entry took its cue from the available development and continues the massing of the existing blocks. Different area uses are clearly delineated and assert the quarter's new identity.

Date: 1992





Above left to right The City Hall square; the residential square; the market place. Each has a its own character.
Below Perspective sketch of the development in situ

Am Marktplatz, Neubrandenburg (competition/design purchased)

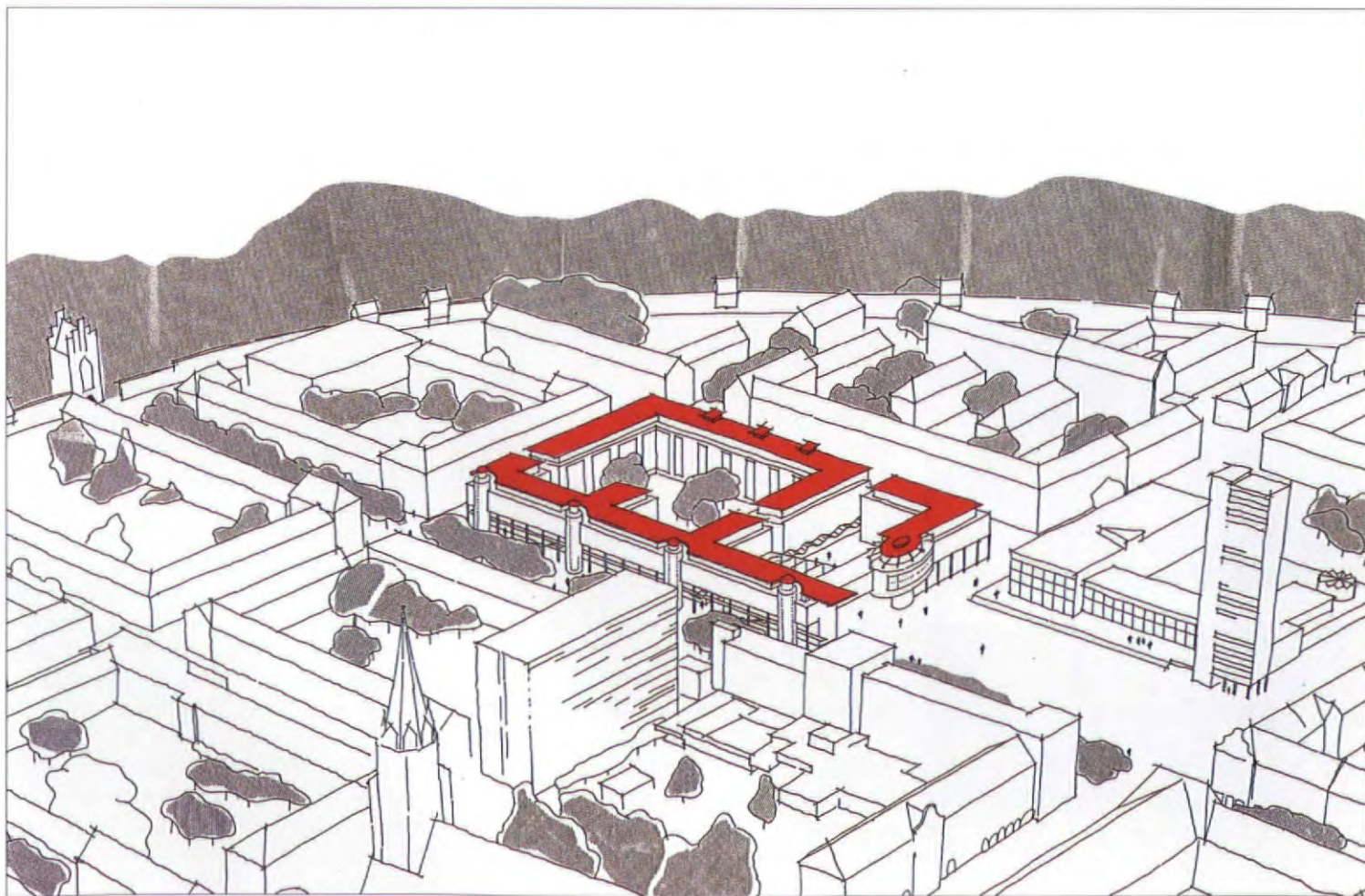
Brief: Redevelopment of city centre, to include City Hall, department store and housing (gross floor area 32,000 square metres).

Challenge: The new development had to fit within strict planning guidelines.

Solution: WGK's scheme was based upon local historic building setback lines. Each component

looks a different way: the City Hall faces the market place, the department store runs along Trep-tower Strasse as an extension of the pedestrian zone, while the residential element lies next to the quiet area at the rear of the site. Two different squares are thus defined: a leafy residential square and a paved square next to the City Hall.

Date: 1992





Architecture in panic survival

A self-confessed “Jekyll and Hyde”, the French architect Rudi Ricciotti explains “I am a mannerist from 8 am to 8 pm, while I am baroque from 8 pm to 8 am”. Commenting on his work to Georgi Stanishev, Ricciotti argues that in the midst of a crisis of ideas, architects will have to refer to the “artistic culture” which he believes is “politically much more advanced than the architectural one”.

Both images by Philippe Ruault



Paul Rafferty



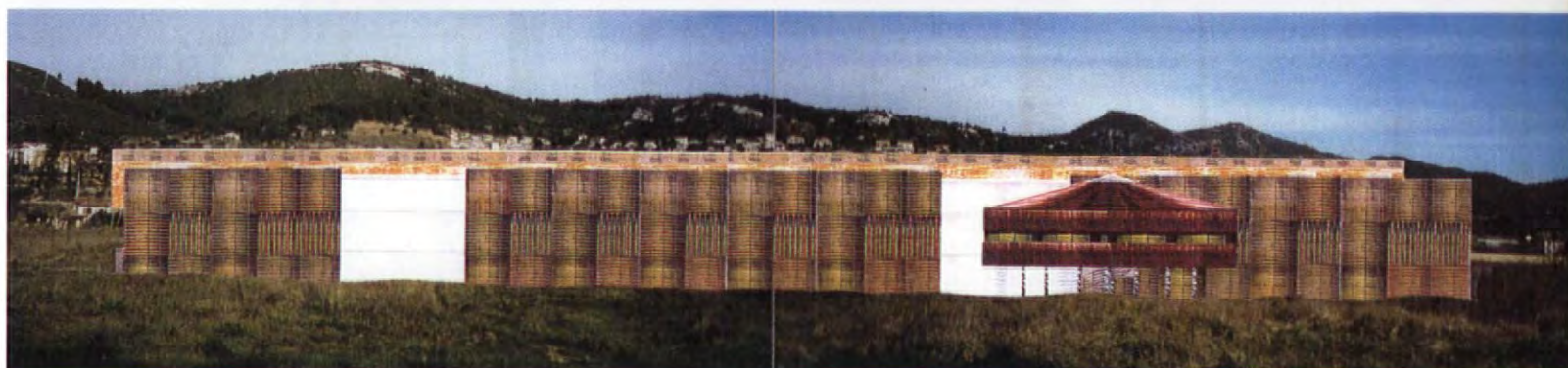
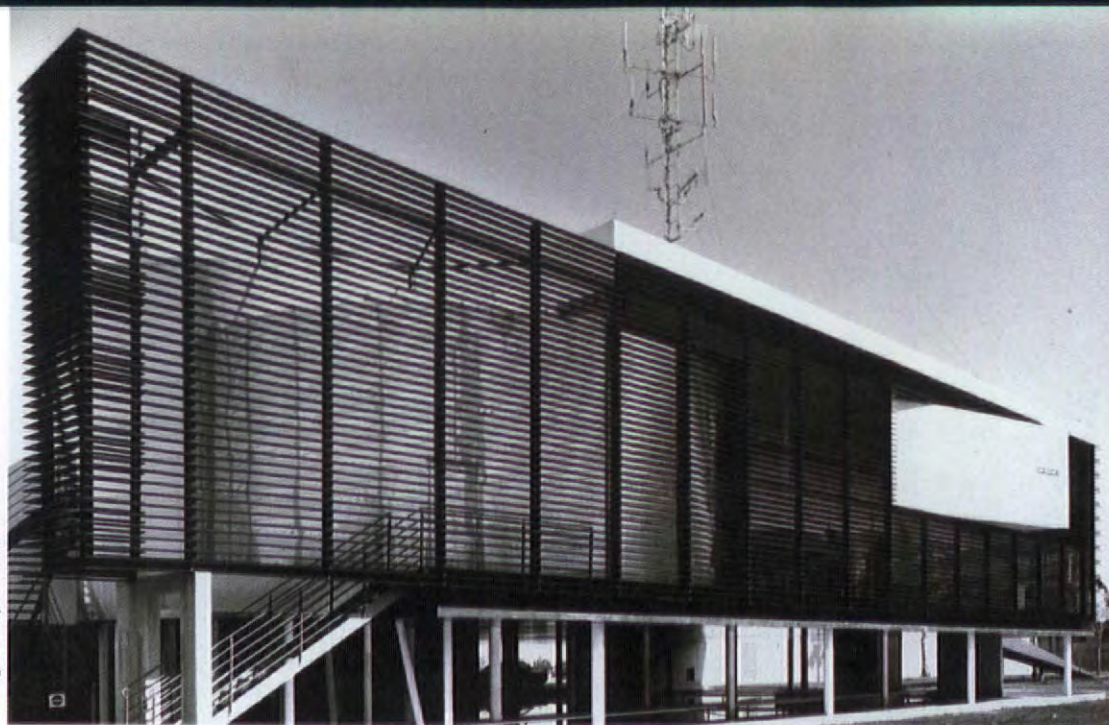
Paul Rafferty

The Mediterranean culture of southern France has brought the region closer to its neighbours in Spain, Italy, and even Northern Africa than to some areas of central and northern France. Such a culture is reflected in physical aspects of the white walls, wooden terraces and distinct shadows caused by the sun, and also in the common archaic overtones, references to history, and relationship to nature. Geographically rooted in the Mediterranean, but historically in the “swinging sixties”, the work of Rudi Ricciotti complements this Mediterranean culture with the moral responses inherited from the final cycle of the modern movement.

But perhaps the most basic of the principles reflected in Ricciotti’s work and philosophy is his conception of the fundamental opposition of the artificial versus the natural; managing the correlation between the volumes and surfaces of his architectural works. Thus, while his

buildings usually challenge the natural landscape with minimalist geometries and shapes, they are clothed with surface planes correlated to the surrounding materials, interpreting and translating the materials into the project, and working as an interface between the building and nature. Wooden abstract-patterned surfaces of the building rhetorically oppose and correlate to the real woods in the Bucolic landscape of d’Uzerche Highway System Centre; the concrete megalith of the Rock Concert Hall, Vitrolles, is in a similarly ambiguous relation to the red rocks outside it – as abstract as Plato’s ideal cube, but rude in finish and colour, reflecting the surrounding landscape.

The logic of the natural/artificial opposition enhances the significance of the borderline monkey and jungle imagery in the St Ouen college, Paris, the elephant in the Rock Concert Hall, Vitrolles, the school patio in the Seyne sur



Mer with a snake on the wall, which works as a draining pipe system, etcetera: while the building is imposing its own geometric orders on nature, it becomes "contaminated" by natural wilderness and liveability, manneristically inserted into the heart of the artificial spaces.

The appearance of Ricciotti's personalised architecture seems to be rooted in the ancient poetic traditions of the Mediterranean. In particular it recalls the principle of transformation of things in the Ovidius Metamorphoses, where natural phenomena – animals, trees, hills, etcetera – were explained as the results of the conversion of human – i.e. cultivated, artificial – things and beings. On the contrary, in Ricciotti's work the architectural project seems to be the goal of a mannerist inversion of the natural norm into an artificial space. Referring to both points simultaneously Ricciotti's works are imprinted with the process of transition.

The poetics of this inversion is a key to the visual controversies of his works: the appearance of the rectangular horizon of the building in d'Uzerche presupposes that this most artificial shape was born out of the natural landscape itself. Hence in mannerist terms Ricciotti's buildings simultaneously share both opposing characteristics: they are both radically suppressing the landscape and disappearing into it.

Georgi Stanishev: Which term would you use to most appropriately describe your work?

Rudi Ricciotti: The term I would choose is certainly "autonomous". I suggest autonomy as the best way to respect the nature of things. While the best way to earn money is to be integrated – in whatever. But I may point out and name many more "enemy" words than "friendly" ones. I am against "alien", because it

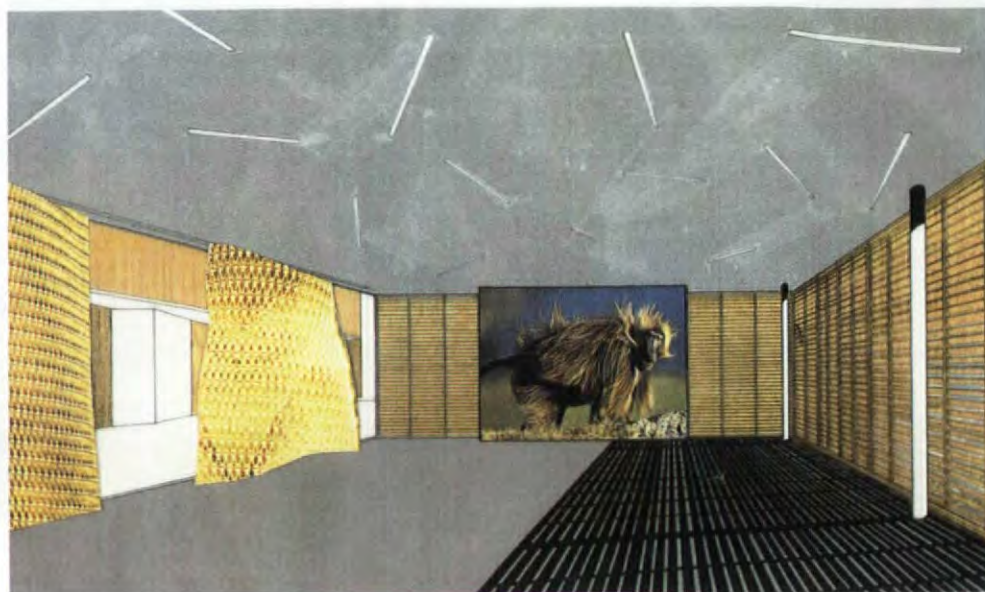
Opposite page top Highway System Centre, in d'Uzerche. Construction finished in September, 1996.

Opposite bottom Rock Concert and Sports Hall in Vitrolles. Constructed in 1994. **Top** C.R.I.C.R. – Regional Centre for the Road Information and Coordination building, Marseille. Constructed in 1994. **Above and left** Project for the Collège d'Auriol. First Prize in an architectural competition, 1995. Total built area 11,000 square metres. Currently under construction

is scandalous to say today "no future" in architecture. For me, to say "hi-tech" is kitsch; to say "energetic" is pretentious; to say "integrated" is demagogic; to say "urban" is commercial; to say "minimal" is without generosity; to say "nothing" is sad; to say "yes" is to say nothing, etcetera.

Then what are you saying about your own architecture?

There is always a contradiction between the real physical articulation and the virtual architectural expression. I believe taking or keeping the distance between these opposites is the only way of surviving in architecture. Architecture today is in a stage of panic survival. For many years there were no innovations in critical or aesthetic thought at all. The internal intra-professional capabilities to renovate are exhausted. But architects do not understand this and they are truly in a state of panic.



Hence they commit, and try, different types of rebellion, but in vain. They could survive only by approaching their profession from a distance, from different types of distances: the critical one – for the most politically active, the collaborationist one – for the most perverse, the corporate one – for the most inculted.

How do you form your own conception of a distance, reflecting your own professional attitude?

I enjoy the interplay of controversies and oppositions between the natural, the barbaric, the wild and the artificial, the cultivated in life and in space. In architecture this distance is realised as a transformation of natural principles and norms into characteristics of the artificial space. Hence I agree that I am a mannerist architect and I am delighted by the artistic possibilities that mannerism is able to provide. But I also belong to the baroque tradition. I am mannerist and baroque. It depends on the days and seasons. Generally, I am a mannerist from 8 am to 8 pm, while I am baroque from 8 pm to 8 am. Something of a Dr Jekyll and Mr Hyde architect. I try to do what I can, and even what I cannot. I am attracted today by the conceptual aspects of vulgarity, appearing as an aesthetic sublimation of generosity.

If nature plays the role of an opponent in your architectural discourse, what is the role of the natural environment in your design decisions?

The surrounding landscape is a pre-text for the solution; a conceptually negative pre-text. I think that a good integration into the environment is only possible through a good rupture with it – as it is in contemporary music: joining things is contradicting and counterpoising them. For example, I believe that the more the site is not horizontal, the more horizontal the building should be. I hate the simulative gestures of physical integration with the landscape by imitating its topography.

Does the expressive minimalism of your

compositions come out of this principle?

I usually do not correlate my work to minimalism: minimum against minimalism is my answer. Low-tech construction and modesty in finishing materials mark the state of my moral preoccupation and represent my conscious and responsible choice. This is my political decision against the building cost inflation, against the academic culture and against the political domination in architecture which degenerates the evolution of architecture today.

Is there any hope that architecture will come out of its present day conceptual stagnation?

New directions are entering our profession from outside architecture. In fact in my social life I have very few contacts with architects. My friends are artists. My free time is for art life, art galleries, art essays, as well as for collaborative works with artists. I truly believe that today the artistic experience is more important than the architectural one, and the artistic culture is politically much more advanced than the architectural one. My intellectual and spiritual exchange with artists is extremely important for my work in architecture, just as the viewer's artistic experience is an important condition to understand my buildings. We live in a post-conceptual period. In fact architects never understood the meaning of this word. The conceptual idea is not some entity which can live outside the fabric of architecture. The concept is the generative principle that constructs the piece of art or architecture itself and must be integrated in the creative act itself. More than ever, architecture must be considered as a sort of writing (a formal writing in 3D space). What I am interested in today is the simplicity of the material in this writing which should be understood as an exaltation of the nobility of the poor.

But isn't architecture one of the artistic fields? Where does the border line dividing art from architecture lie?

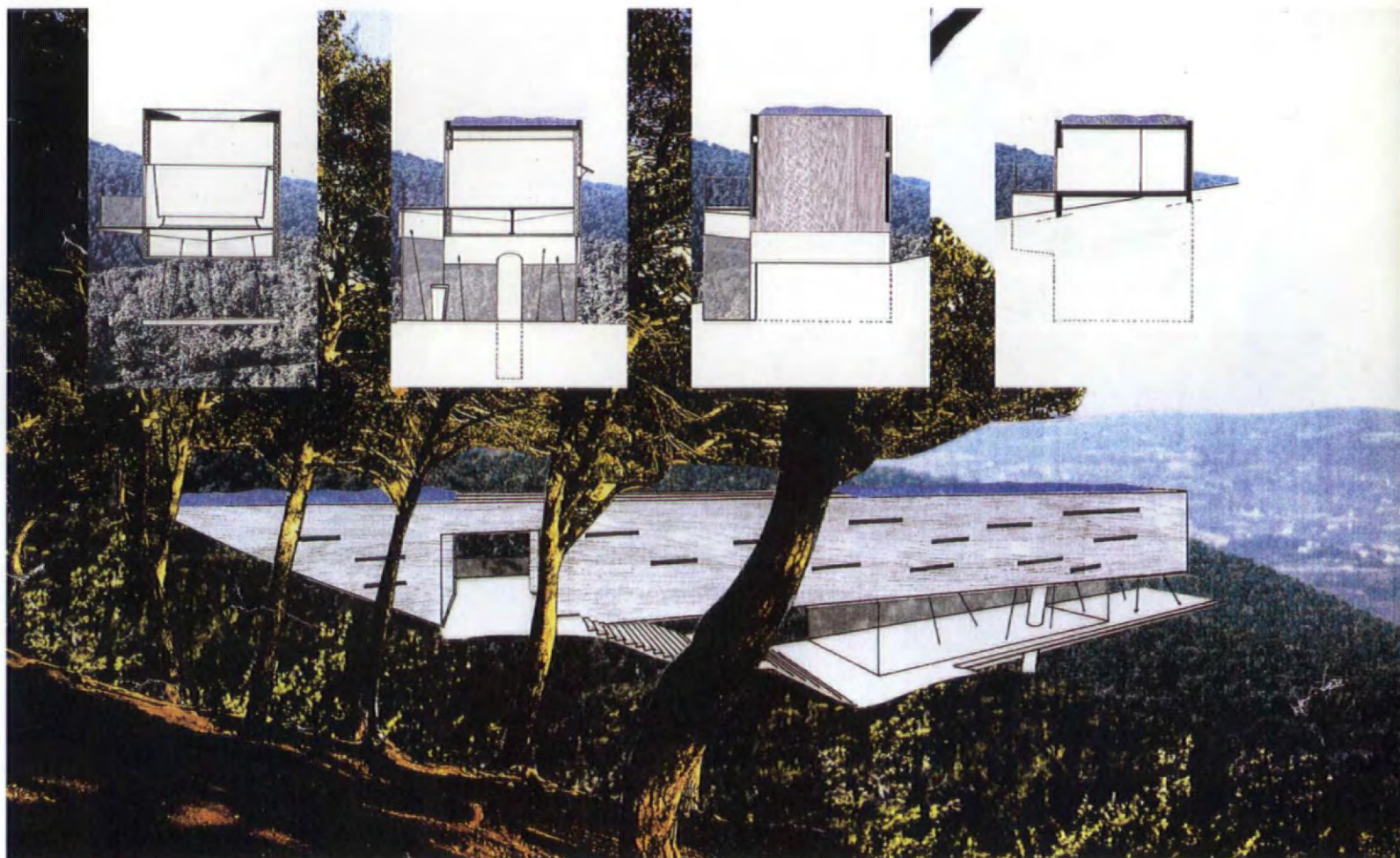
Architecture is late, in correlation to art pro-

cesses. The architect has lost his political responsibility, while the artist is still trying to keep it alive. Art is no more a discipline, the experience of the conceptual art has blown up this definition, while architecture is still a discipline with a certain academic character frozen in its social dimensions. Unlike artists, architects today are collaborationists with power. They do not work in the field outlined by political legibility, as it was in the twenties and thirties. They only helplessly reproduce the architectural modes of those years, exhausting the forms and becoming reactionary. I suggest that the architects would have the interest to expand radically the field of their critical responsibility, to join and support the artistic circles. But this seems to be too high a requirement to our profession, overloaded with consumerist, technological, financial and advertising demands.

What is your latest architectural statement?

In my winning project for the Abbey building in Arles this year I promoted the idea of the minimum in opposition to the minimal. I had to revise the initial programme so as to become able to offer an altitude of critical behaviours. For example all the floors are planned of primary concrete which is quite unusual when you speak of an historical monument and a museum. Modernist tradition recognised the concrete nobility in its vertical position only. This is because of the fine arts tradition, and the vertical position of the painting when it is hung on the wall. The vertical plane refers to the iconography of power. And the problem was to force the administration authorities to accept the concrete as not only innovative, but also the only relevant material in the horizontal plane. It is similar to persuading my clients that a rich stone on the floor is a shameless and indecent homage to the power. Hence I presented the concrete as a piece of *arte povera*, as a gesture to the nobility of the poor.

WA



Above Housing Project for apartments for artists, Centre d'Art du Crestet, Centre National des Arts Plastiques. Project completed June 1996



Above left and above Nautical Centre, Bandol. Construction finished August, 1996. **Left** Project for College de St. Ouen, Paris, 1995. Total built area 5,000 square metres. **Right** Project for the Museum conversion of the Arles Abbaye de Montmajour, June, 1996





DON'T THROW STONES (OR BOMBS)

The Glasshouse. By John Hix. Phaidon. 240pp. £45 (hardback)

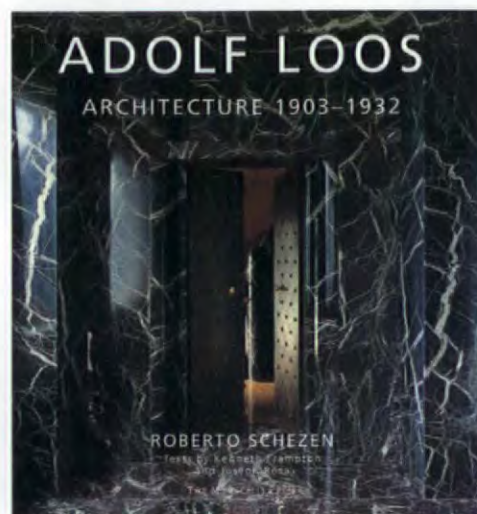
Reviewed by Martin Pawley

"In dissociating light and atmosphere from the context of the natural overall atmosphere by means of an 'almost ethereal' barrier, ferrovitreous architecture creates a novel condition. Light and atmosphere are now perceived as independent qualities, no longer subject to the rules of the natural world in which they had hitherto manifested themselves. This process is comparable to the experience of pure speed on a railroad, that is, speed perceived as an independent quality because it is divorced from the organic base of horsepower." So wrote Wolfgang Schivelbusch in his seminal work *The Railway Journey*, published in 1977. It is a quotation missing from *The Glasshouse*, but it is important because it hints at the many pitfalls that have accompanied the architectural fascination for glass construction over the centuries, from the earliest greenhouses and the rise of the concept of achieving automatic climate control by means of a building's envelope. Not that the author is unaware of these pitfalls. He has (*inter alia*) his own warning quote from Reyner Banham which reads: "An intelligent commercial glasshouse operator judiciously metering temperature, moisture and carbon dioxide levels...has more environmental

knowledge at his fingertips than most architects ever learn."

The story told in this lavish but puritanically overdesigned book is indeed cautionary. Fascinated by glass architecture from his youth – he built a glass dwelling using greenhouse technology at Cambridge in the early 1970s (which does not appear here) and also published a modest book on the subject at that time (which is uncredited) – the mature Hix now sees the field as dominated by little-known nineteenth century glasshouse builders who knew more about it than anybody else ever has. Parts of their story almost match the contemporary search for the North West Passage, except that, unlike that classic tale of maritime and Arctic misery, the goal of the old glasshouse builders has still not been fully attained today. Outside the field of horticulture, as the new Foster and Partners' design for a 1,200-foot glass tower for the City of London shows us, the concept of perfect transparency remains a kind of holy grail for the achieving architect, however little he or she may be aware of the limitations revealed by its history. In this sense glass architecture may always be a dream repeatedly shattered, as it has been in the 200 years since glasshouses first became synonymous with modernism, daring, low-cost warmth and technical progress. Just as Joseph Paxton's Crystal Palace was eventually destroyed by fire, so were many other seminal glass structures including its most sincere imitator, the Munich Glass Palace of 1854, and one of its most recent descendants, the polycarbonate glazed, one acre United States Pavilion at Montreal's Expo 67, a spectacularly advanced domical structure that was consumed by flames during refurbishment only nine years after completion.

In connection with these dramas, it is a pity that John Hix's otherwise exhaustive study does not lead to a more impressive conclusion. Instead, after its encyclopedic survey of nineteenth century glass horticultural and exhibition buildings, it peters out with a scrappy attempt to include at least a picture and a word about more recent examples, some of the most important of which, like Buckminster Fuller's 1954 Saint Louis Climatron, are left out. Perhaps a subsequent edition will remedy this defect. The book deserves it, for it almost inspires the reader to undertake the enterprise of glasshouse building themselves.



MISSION IMPOSSIBLE

Adolf Loos Architecture 1903-1932.

By Roberto Schezen, with introduction by Kenneth Frampton and building descriptions by Joseph Rosa. The Monacelli Press. 180pp. US\$40/£27.50 (paperback)

Reviewed by Jon Hale

Kenneth Frampton, master of the book introduction, lifts what could otherwise have been a rather pompous coffee table book into something that warrants a second look. His scholarly essay attempts to place Loos's work in the context within which it was created. The inquisitive newcomer to Loos might well be encouraged to seek out further reading to obtain a fuller picture of the man and his architecture. The inattentive reader/viewer would probably flick through the photographs, admire the use of sumptuous materials and clever details and leave it at that. The building descriptions by Joseph Rosa do little to improve the situation. The very general commentaries give little clue to the real issue that concerned Loos and which helped to define his ideological and spatial criteria. The words "comprise", "configure" and "datum" appear with tedious regularity, the author obviously struggling with the task in hand.

Schezen's photographs vary in quality, and considering that the book is newly published certain pictures are unfortunately out of date. The exterior of Kärntner Bar, for instance, was faithfully restored a number of years ago, but that is not represented here.

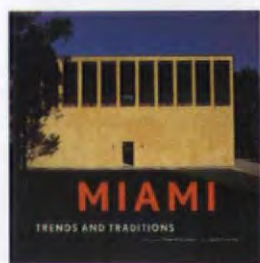
The attraction of this book is the sheer

number of images. If taken solely as a visual reference source to supplement more considered accounts, Schezen's book could be deemed worthy of a place on the bookshelves of any Loos enthusiast. The lack of photo captions is unfortunate, but if familiar with the buildings it is possible to find your way around.

Coverage of a number of less well known projects, especially some from the Czech Republic, are welcome inclusions. Access to most of these is limited and many of the interiors have been badly damaged and may be lost forever. The sugar refinery at Hrusovany, for example, demonstrates that Loos was far from just a domestic architect.

Loos expressed pride at the ineffectiveness of photographing his interiors and equally recognised their limited potential for publication in architectural magazines. Schezen uses multiple images to produce a kind of "video walk through" in an attempt to convey the nature of the spaces. He has set himself a demanding task; one that is only partially successful.

At worst this book is architectural soft porn, images without emotions. At best it is a useful pictorial reference source. If you can't get to see the buildings this book may be part of the answer. Reading Loos's own essays will convince you of the futility of Schezen's work. Loos himself stated "I am proud of the fact that the inhabitants of my spaces do not recognise their own apartments in the photographs..." so why should we?



Miami Trends and Traditions. Text by Beth Dunlop, photographs by Roberto Schezen. The Monacelli Press. 240pp, 169 colour illustrations. US\$60/£40 (hardback)

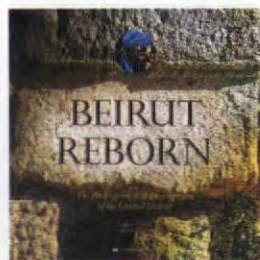
Dunlop and Schezen's book traces the architectural traditions of Miami from the early influence of Mediterranean and Caribbean styles, to the impression left by the modern

movement in the latter half of the twentieth century. *Miami Trends and Traditions* covers both the city's known architectural landmarks, as well as the role of private residences in creating the larger sense of the city. (Miami is the first in a series of books documenting architectural traditions in cities around the world).



Sir Banister Fletcher's A Brief History of Architecture. Edited by Dan Cruickshank. Architectural Press. 1,696pp, over 2,000 illustrations. £75 (hardback)

The twentieth edition of Sir Banister Fletcher's epic reference guide to world architecture includes new chapters on the twentieth century architecture of: the Middle East, South East Asia, Hong Kong, Japan, Korea, the Indian sub-continent, Russia and the Soviet Union, Eastern Europe and Latin America.



Beirut Reborn: The Restoration and Development of the Central District. Angus Gavin and Ramez Maluf. Academy Group. 148pp, 258 illustrations. £39.95 (hardback)

In the aftermath of the 1975-1990 Lebanese war significant areas of the once pre-eminent Middle Eastern city of Beirut lay in ruins. Gavin and Maluf's look at the renewal of the city centre takes in: infrastructure renewal; urban archaeology; the restoration of the urban fabric, and the creation of a social area in which the people of the Lebanon can begin the process of relaunching their capital.

BOOKS RECEIVED

Tadao Ando: The Colours of Light.

Photographs by Richard Pare, with an introduction by Tom Heneghan. Phaidon Press. 288pp. £60 (hardback)

For Inspiration Only: Future Systems.

Academy Group. 128pp, fully illustrated throughout. £14.95 (paperback)

Winka Dubbeldam Architect.

Introduction by Michael Speaks. Uitgeverij 010. 60pp, over 200 b/w and colour illustrations. £20 (paperback)

Robert A M Stern Buildings.

Robert A M Stern. The Monacelli Press. 448pp, 400 colour and b/w illustrations. US\$75/£50 (hardback)

Paradise Transformed: The Private Garden for the Twenty-First Century.

Guy Cooper and Gordon Taylor. The Monacelli Press. 224pp, 180 illustrations. US\$50/£35 (hardback)

Moshe Safdie.

Edited by Wendy Kohn. Academy Group. 320pp, 300 illustrations. £49.50 (hardback)

Undesigning the Bath.

Leonard Koren. Stonebridge Press. 111pp, b/w illustrations throughout. US\$16.95. (paperback)

Wabi-Sabi, for artists, designers, poets and philosophers.

Leonard Koren. Stonebridge Press. 95pp, b/w illustrations throughout. US\$14.95 (paperback)

Academy Historical Building Series:

The Melnikov House. Juhani Pallasmaa with Andrei Gozak. 80pp, 48 b/w illustrations.

How House. James Steele. 80pp, 50 b/w illustrations. Both books £15.95 (paperback)

Carlo Aymonino.

Foreword by Peter Eisenman. Critical essays by Francesco Dal Co, Achille Bonito Oliva and Giorgio Giucci. Academy Group. 128pp, 150 illustrations, £21.95 (paperback)

Source Book of American Architecture: 500 Notable Buildings from the 10th Century to the Present.

G E Kidder Smith. Princeton Architectural Press. 700pp, 500 b/w illustrations. US\$50/£35 (hardback), US\$34.95/£23 (paperback)

Special Report – Hotels

The entertainment business Hotels into the 21st century

The business of creating an escapist environment is proving more lucrative than ever before. In an architectural survey of the world's largest industry, Katherine MacInnes reveals a tendency towards luxury and fantasy, coupled with a need for the latest technology. The gap between the needs of international executives and holiday-makers is closing, and the entertainment giants are moving in for the kill.





Opposite page Le Meridien Noumea, on the Pacific island of New Caledonia. This 253-room, latter-day French colonial hotel was opened in February 1995. **Above** The Park Hyatt, Los Angeles and **above right** Hyatt Regency Dead Sea resort and spa hotel, Israel. Chains such as Hyatt are employing signature designers and architects in order to create hotels with a sense of identity. Hyatt aim to have 200 hotels world-wide by 2000 but they are still smaller than the global network of five star hotel and resort properties that was created when the North American Four Seasons joined with the South East Asian Regent Hotels. **Right** The Ciragan Palace Casino, Istanbul, Turkey. Richard Ellis is the architect in charge of the US\$1.5 million refurbishment of the hotel/casino which will re-open in late 1996



With the demise of the standard hotel room, architects and interior designers are rejoicing in a renaissance of refined luxury. Chains from the Hilton to Novotels and to French worker hotels such as Formule 1 were, until recently, based on the premise that "abroad" can seem a hostile place. Designs therefore reflected the reassurance which comes from waking up in the middle of the night and knowing that room service will offer exactly the same snacks and that the light switch will be in exactly the same position whether you are in Los Angeles or Jakarta.

While the current world slump in real estate values has forced hotel management to rely on network strategies to capitalise on mass tourism and marketing infrastructures, the hotels themselves are becoming more individual. The emergence of the "boutique hotel", a term coined by American hotelier Steve Rubell, signals the end of a time "when Novotel could plod down a clean and comfortable

concrete cube". Australian hotel architect Kerry Hill claims that "hotel guests seek something that is out of the ordinary, even on business trips." Apart from ever more advanced "office facilities" most hoteliers believe that there is no essential difference to the demands of the business man and the tourist, although they must be able to select different facilities.

International hoteliers Luc Vaichère and Didier Lefort maintain that "luxury must be expressed through the force of the concept not simply by adding an increasing number of decorative elements". But the notion of luxury is subjective: some see a hotel building in terms of the quality and quantity of services rather than an architectural success story, some actively seek ostentation. The French hotel architect, Eric Raffy suggests that "a hotel is a place where people go for entertainment. It needs to be given its own personality whilst also fully incorporating draconian technical constraints." And in this context: "Luxury

means understanding the local culture to give a strong sense of location and a zest of perversion by offering snippets of other cultures to transgress day to day realities".

Individual hotels require two ingredients to be successful: a visionary hotelier and an exceptional designer. Perhaps the most famous partnership of this sort is the Ian Schrager/Philippe Starck duo: Schrager selects "gateway city" sites from North America to Hong Kong and provides the financial backing for Starck to realise the fantasy. Luc Vaichère and Didier Lefort have worked with Kerry Hill in Asia. Pedro Ibanez, the Chilean hotelier and head of Explora, entrusts architect German del Sol with his remote sites from Patagonia to the Atacama Desert in South America (see WA48). As the world's biggest owner of casinos, Donald Trump has used the services of his father's favourite architect, David Jacobson, in all his recent casino-hotel projects.

"Luxury must be expressed through the force of the concept not simply by adding an increasing number of decorative elements"

NORTH AMERICA

The North American hotel market only recovered from the over supply in the building industry that took place in the US hotel market in the late 1980s, three years ago. This new construction was virtually all of the limited service variety with management companies such as White Lodging Services, Tharaldson Lodging, Summit Hospitality and a variety of smaller developers building Courtyard, Residence Inns, Comfort Inns, Sleep Inns etc. Future developments in 1997 are likely to focus on modestly priced full service hotels such as Marriotts and Hyatts by both the above developers and others, including John Q Hammonds, IMPAC hotels and Sage Hospitality. The trend to acquire new buildings will continue with Servico Inc, Shaner Hotels, Columbia Sussex, HEI and Regal.

Themed developments in North America indicate that "entertainment" will be the catch phrase of the next century. Gregory Hartmann

of HVS in Colorado predicts that providing functional rooms in convenient locations will be overshadowed by the provision of themed hotels in exciting destinations. As business travel decreases due to advances in computer technology and teleconferencing, traditional full service and limited service hotels will become less desirable. However the need to escape the pressures of work and domestic environments will become increasingly prevalent. Resorts offering technologically advanced rooms and amenities in tourist destinations will be the most likely development opportunity at the turn of the century. This has already been seen to some extent in Las Vegas during the 1990s. Tishman and Disney are likely candidates for continuing this strand of development along with most of the major hotel and entertainment companies.

Western Canada is more popular for hotel investments than the country's east coast but, according to Canadian Lodging Outlook, the highest occupancy and average rate in the whole

country was in the land-locked Alberta Mountain Resorts in Banff, Jasper and Lake Louise where it is rumoured that Hyatt, Westin, Holiday Inn and Marriott are looking to develop. An indication of the strength of the west coast is the Asian investment which has centred on Vancouver, British Columbia. Concord Pacific Developments is realising North America's largest private property project on the 200-acre site of the Expo 86 World Fair in the city. Its share holders include Hong Kong tycoon Mr Li Kashing, the British colony's Hui family and Taiwan's Lin family.

SOUTH AMERICA

Mexico, Brazil and Argentina between them, share 35 percent of the South American hotel market. International hotel companies have been slow to recognise the opportunities, but several are now focused on the region and its opportunities. Hyatt, Hilton Inter-Continental, Four Seasons, Marriott and Accor are the



Opposite page Sydney Harbour Casino by the Cox Group, Australia. Architects and interior designers from both the Hillier Group and the Cox Group are working intensively to see the A\$650 casino fast-tracked to completion. **Below left** Robert Peck von Hartel Trethowan's 350-room hotel on Melbourne City Square, one of three hotels undertaken by the firm in preparation for the Sydney Olympics in 2000. **Below right** The Adelphi Hotel, Melbourne, Australia. Denton Corker Marshall's "designer", 34-room hotel in the heart of Melbourne's business district. The laminated, glass-bottomed pool stretches out over the pavement, eight storeys below allowing swimmers "the thrill of gliding into the air in perfect safety"

most active in the region.

Since President Fujii Mori has been in power in Peru, Lima's hotel industry has been booming and its supply of hotel rooms is expected to double within the next three to four years. Most companies are building both in Lima and in Cusco, where the country's most important archaeological attractions are located, although as yet the Sheraton Lima is the only hotel of an international chain.

Chile and Argentina, in South America's southern cone, constitute the largest business hotel market. German del Sol, architect of the successful Explora hotels in Chile predicts that tourism will follow, and a tremendous growth is expected in the next five years. In Argentina, hotels are based in towns rather than in remote outposts as they are in neighbouring Chile. In Santiago, the capital of Chile, big city hotels are attached to shopping malls whereas in the older, European-style Argentinian capital of Buenos Aires, the street life is more established.

EUROPE

In Europe the western countries still maintain the largest slice of the hotel pie. During 1995, London recorded the highest profit increase of four and five star hotels at 16.8 percent, with Amsterdam, Barcelona and Stockholm achieving value increases of over 10 percent. The lowest value cities were Lisbon, Athens, Barcelona and Copenhagen. The highest climber in rankings was Amsterdam which rose from eleventh in 1993 to sixth in 1995. Madrid, on the other hand, declined from seventh to eleventh.

In France, the disappointing performance of the "internationalised" EuroDisney reinforces the argument for culturally-specific hotels regardless of international clientele. But Frantour, which falls within the 2-star hotel category, has been extremely successful in Paris, where the interior architect Gilbert Hamon has recently completed two new hotels.

There were 21 million visitors to Britain last year, each of whom on average spent

more than a third of their holiday expenditure on accommodation but, according to the results of a British Tourist Authority survey, chief executive Antony Sell claims that UK hotels do not stand up to international comparison. New methods of working should produce good results: JC Interiors working on a "turn-key" design and build contract were responsible for building services right down to details such as artwork and china. The Canadian developer Paul Reichmann is entering a joint venture with a Singapore-based property group to develop an 11 acre site in phases over six years to create hotels in London's controversial riverside development, Canary Wharf.

In Central Europe, Prague attracts the most visitors but its popularity preceded a coherent tourism development plan which has led to problems with the planning infrastructure. For example, the Four Seasons hotel ran a competition for a new build project on a river site in Prague but although a finalist





Opposite page The Peninsula Hotel, Bangkok, Thailand by Brennan Beer Gorman Architects. The hotel is being developed by Siam Chaophraya Holdings Co Ltd, a joint venture company. **Below left** The Hanoi Horizon Hotel, Hanoi, Vietnam by the Cadiz Design Group (CDG International). Due to open in late 1996, the four star hotel will cater for an international, business clientele. **Below right** Simon Jackson & Associates won a limited competition to design the interiors of the new 23 storey, 350 room, four star Cathay Pacific Airways staff hotel at Hong Kong's Chek Lap Kok airport, scheduled to open in 1998. The hotel will form part of a US\$448 million development which also includes a new 10 storey office headquarters for the airline

was chosen, the competition was ambiguously deemed "unsatisfactory" and is currently being re-run.

More emphasis on environmental sensitivity has been made in Turkey, and the surrounding region, to capitalise on natural features. For example the Ciragan Palace hotel is being refurbished for US\$1.5 million and the British firm Oscar Faber have been employed to implement a programme aimed at cleaning up the Bosphorous.

In Eastern Europe, the hotel-leisure business has historically been state-owned but it is gradually being developed by private enterprise. In Bucharest, Romania, there has been substantial activity with the new Mara Hotel Sinaia, Romania's first five star hotel. It was developed by Mara Investments, a private Romanian company formed in 1990, as the pilot hotel of a long term project aimed at reinvigorating Romania as a tourist destination after the industry was brought to a standstill in the last decade of the Ceausescu regime.

MIDDLE EAST

In the Middle East, second generation hotel developments are now providing for tourism as well as business but, according to a survey by HVS International, there is now a danger of

over-supply. Chains such as Sheraton, Inter-Continental and the Holiday Inn show a sharp rise in occupancy rates from an average of 43 percent five years ago to 62 percent in 1995. Russel Kett concludes that "if occupancy rates are to remain at their present level, this would require the Middle Eastern Tourism market as a whole to grow by approximately 8 percent per annum."

ASIA PACIFIC

Hotels in some areas of South East Asia are important social contact points for both business and private functions such as marriages and other family celebrations. They are used as a status symbol to express an individual's place in a professional hierarchy which has led to the construction of "demonstrative" hotels, which are designed around specific social aspirations, with an unusual amount of space dedicated to public space. Lower air fares and changing tourists' tastes mean that South East Asian countries constitute a new market with growth potential of up to ten percent per annum. This is a non-saturated market where there is still potential for large complexes offering complete ranges of service in or near urban centres.

Fiji is setting an unusual precedent with concessions for Malaysian investors interested in

hotels. According to the Prime Minister Sitiveni L Rabuka the first five hotels built before 2000 will receive "duty free import of materials and easy repatriation of profits plus 20 years tax free status". Rabuk intends to increase revenue from tourism by attracting investors willing to construct facilities for tourists.

Architect Kisho Kurokawa claims that business hotels in Japan are functional, compact and low cost, ranging from the sleeping "Capsule hotels" of the 1970s and 1980s (now making a comeback in the recession when companies cannot afford the cost of taxis home) to hotels which provide up to date hi-tech office facilities. Like the rest of South East Asia, there is a big market for social function rooms but in Japan there is a generic type called ABECU or "love hotels" which are a socially acceptable result of the lack of privacy the necessarily compact Japanese family home affords. Reputable international architects such as Aldo Rossi are becoming involved with themed hotels in this sector.

In Australia, the remarkable growth of the luxury hotel market can largely be attributed to the Olympic Games 2000. In Sydney and Melbourne, for example, Robert Peck von Hartel Trethowan are planning three centrally located hotels with over 350 rooms each. **WA**



Mutual dependence

Ian Schrager and Philippe Starck have an understanding: the secret of their success can be traced chronologically through their hotels, from the extravagance of the New York Royalton to the budget Paramount, then south to Florida and the sumptuous Delano and finally, opening this month in Los Angeles, the Mondrian. Katherine MacInnes spoke to both halves of the most extraordinary client/designer partnership of the twentieth century.

SCHRAGER

"Philippe Starck wants to give up designing" said Schrager in an interview last year "but I won't let him" and sure enough a year later, on completion of the Mondrian, Schrager and Starck are beginning work on the Sandersons building in London. "I would like to use London as a base for opening up in Europe," says Schrager. And so the success story goes on...

What is their secret? Schrager claims that it is their ability to create "a manifestation of popular culture". He is at pains to point out that this phenomenon "is not design led. It is the idea or concept behind it. Philippe is not about decoration, his work is not static, unlike a lot of other designers who I have worked with, it evolves, it captures a certain reckless attitude". Comparing the process with the archetypal American dream, Schrager says: "When Walt Disney set out, for example, the animation techniques were available to everybody else but for some reason the way he used them touched people. It had a profundity."

"Starck's work is no less an expression of a point of view than when a poet writes a poem or a writer writes a piece of prose. He is trying to say something as I am trying to say something as the 'editor' of the design." Because we must remember that "if Philippe could do a

successful hotel on his own, he would".

How does Schrager choose his architects? "Well it is something very intuitive. Very personal. Something I see in a magazine. I remember seeing Philippe's work at Café Costes in a book and I thought – here is a guy who can maintain the essence of a traditional French bistro but in a completely modern context. And that he could provide a bathroom that was pure entertainment. Where the bathroom, rather than the bedroom, was the main focus. So I thought, maybe he can do the same thing for a hotel".

Schrager has worked with a star studded line up of designers. He encourages cross fertilisation: "I asked Andrée Putnam to create Morgans hotel for example and the architect Arata Isozaki to design the Palladium nightclub. I always try to stretch the envelope to find inventive, creative solutions."

He also aims to create a "vertical market" which he famously refers to as "blue jeans next to ballgowns". Expanding on this he explained, "when I was in the nightclub business, I did a lot of people watching. I want to create an electricity and a buzz. I am 50 but I consider myself young at heart. Many people of my generation want to be with young people. And I am sure young people want to be with maybe rich and distinguished people. That creates an

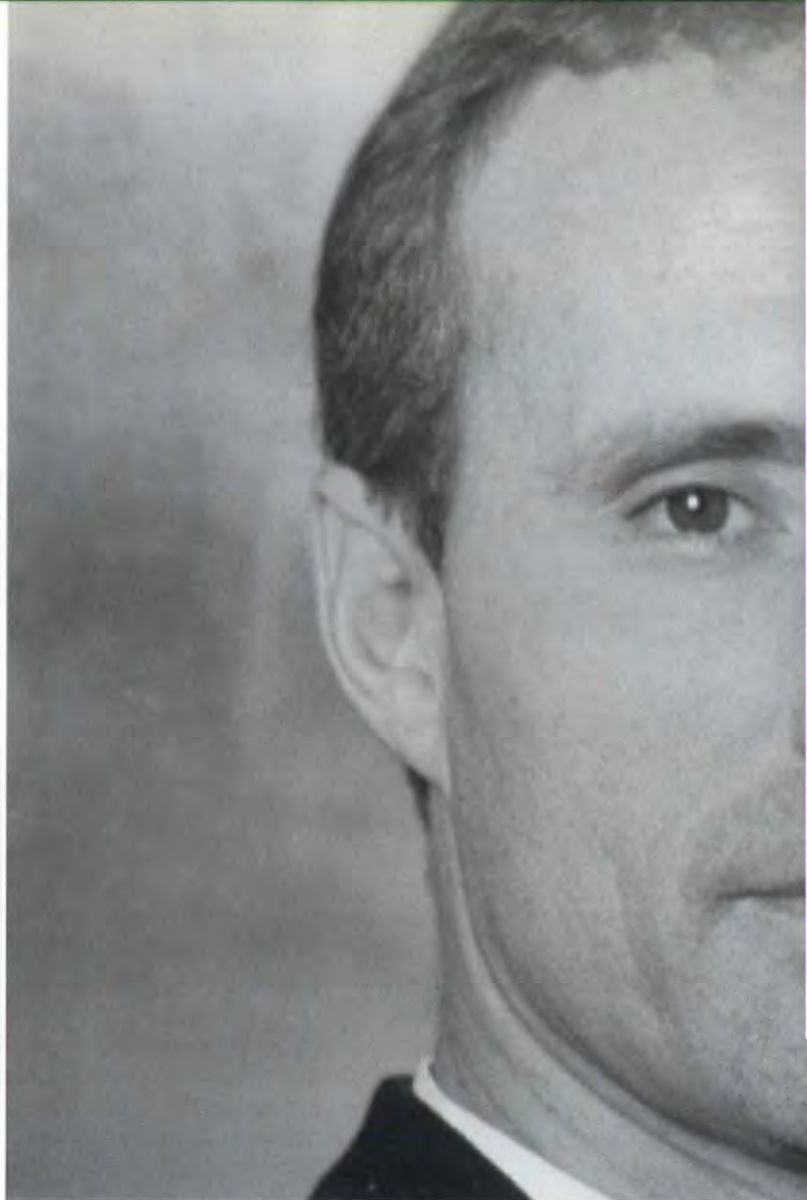
interesting mixture".

But ball dresses aside, what about the architects of the design? "Well you know, I think that hotels are more about architecture than anything else. People go to a hotel for emotional reasons. They want an emotional visceral experience, you have to answer spiritual needs in a way that other buildings don't. Choosing an office building is based on needs and, for example, the rental costs. With hotels the choice is more subliminal. That is what the architect has to capture; it is a very ephemeral thing."

What raw materials is the architect given? Are the hotels usually new build or renovation? "It depends on financial considerations and the opportunity. In a lot of ways old buildings are more treacherous, there are always conditions. In a new building there are no surprises. You develop a concept and you go and do it. Old buildings have hidden surprises. But I would love to build a new hotel."

And, the million dollar question, who would you choose to build your new hotel? "Who would I choose? Well I would choose someone like Santiago Calatrava. I think he is a poet like Philippe. I love his bridges in Barcelona, and I would love to see his building in Kuwait which moves."

So what of the future? "Well, Asia is an





"I am not a good decorator. I have no taste. I work with semantics and symbol and around enjoyment. I want to propose a better life."

Philippe Starck

exciting market, but I just went to Vietnam. That took me 32 hours. It is ridiculous. And let me tell you the last thing that Vietnam needs is a hip hotel by Ian Schrager. In the southern hemisphere people have invited me to look at Australia. But I don't like travelling. It is a personal thing. Hotels are a very hands-on business, at least that is the way I run them. Right now we are very busy over here opening in San Francisco, Chicago and Washington DC. I am still looking at Gateway Cities around the world because these are the key to successful urban hotels."

STARCK

"I am a maniac" states Philippe Starck just back from two months retreat in a secret island fortress with his fiancée and baby – "when there is the opportunity to invent, how can you just find something from a catalogue? Even from my catalogue? You must design it from scratch." To present a coherent proposal, Starck claims that each hotel must be filled with objects designed specifically for that project. "I am not a good decorator. I have no taste. I work with semantics and symbol and around enjoyment. I want to propose a better life."

So does he create nationally specific designs? "Well, the lobby of the Mondrian in Los Ange-

les will be like an art gallery, and the lobby of Sandersons in London will be like the centre of a city. Does that answer your question? But I don't look at what other people are doing there. Either I don't like it and it makes me nervous, or I see it is better than what I do and I am jealous and it still makes me nervous."

Although at the time of publication it was "a little early" to give details, Starck revealed that he is working on three new hotels in Europe, drawing on his experience as "a designer in Italy, an art director in France, an architect in Japan and an interior designer in America".

"I think that London is the hottest city at the moment. It is exciting to design during an energy boom. It is lively enough to sustain the 'boiling bucket' [melting pot] that I propose to create with Ian Schrager in the Sandersons building off Oxford Street. The ground floor will be huge. There is space to invent a lot of different places for people to go. It depends on their mood, the time, their tribe (very important) and I think I am not completely stupid when I say that it can be the next centre of the city. You are not obliged to trust me, but you can trust Mr Schrager to do that."

"The Royalton, Paramount and Delano are all old buildings and you have to play with that. Although Sandersons is 1950s or 1960s it

is still very modern and clean with huge space and lots of light. With this one we will really invent what can be a modern hotel. It is important, with only three years left until the third millennium, to propose a modern life."

"Asia is the new centre of the civilised world. I like Asia. I am comfortable there because the people know how to work with symbol. They have more semantics than us. That is why you can work more sharply. There is also incredible know how. The craftsmen can make anything, even something that disappears completely." In Asia he is working with the UK-based Asian developer, Mr BS Hong who Starck describes as "one of the new Asian masters of the world. Incredibly elegant and has, not a brain, but a computer and with this sort of person you can always design something very good. The first project in Asia", Starck confides somewhat ambiguously, "will be on the coast. Affordable quality for young people, complemented by something for rich people".

And what of hotels in the future: will people want to hide like Starck in remote island fortresses? "There is no rule. You need a lot of different things. The only rule is that you need freedom and that involves choice. Sometimes you want to be in the centre and sometimes on the edge. It depends."

WA

Interview 2

Below left The first and second prize went to schemes coincidentally reflecting current research undertaken by WAT&G. First place: *Hotel on the Ocean's Reefs*; Oklahoma State University, USA; John Campbell, Brian Fitzsimmons, Chad Schmidt, Feng Han Tan. A scheme to take advantage of "the vast territory of ocean...[which] remains largely uncharted...The design inspiration is derived from a jellyfish, whose top portion serves as an instrument for propulsion and buoyancy, and whose lower portion is where the essence of the organism lies."



Fast forward

Since its founding in 1945 the Hawaii-based firm of Wimberly Allison Tong & Goo has been responsible for the design of more hospitality projects than any other firm in the world, with a client list including almost every major international, national and regional hotel group. In June this year WAT&G celebrated their fiftieth anniversary with an international competition for the Hotel of the Future, run in conjunction with the Association of Collegiate Schools of Architecture (ACSA). Upper-level architecture students were asked to project their ideas for hotel accommodation in the year 2045. From a selection of 600 participants from over 100 schools in 35 countries, six cash prizes and seven certificates of merit were awarded. Nicola Turner spoke to three of WAT&G's 20 directors – Ronald Holeck, Howard Wolff and John Elliot, and asked about their involvement in hotel design today, and their ideas for the future.

WA: Wimberly Allison Tong & Goo have completed work in over 60 countries from offices based in Honolulu, Newport Beach, London and Singapore. Where is the majority of your work now concentrated, and what are the reasons for this?

WAT&G: You have to be two things to work around the world: nimble enough to go where the action is, and humble enough to listen once you get there. We take pride in working with the local architects in all the various countries. Our current work breaks down

geographically as follows: Asia Pacific is 47 percent of our work; India 12 percent; the Middle East 12 percent; Europe nine percent; Africa seven percent; South America five percent; Greater China two percent, and six percent on the US mainland. The reason for this spread is three-fold. One, since we have chosen to specialise, our expertise is known worldwide. In fact, according to *ENR* magazine, based on 1995 revenues, we did more work outside our home country than any other architecture firm in the world. Number two, travel and tourism is the world's largest industry. Together with our clients, we simply follow the trends regarding where people are travelling and what they want to experience once they get there. The third reason, is that we have targeted specific destinations, based on our own research, and have pro-actively pursued opportunities in those areas. For example, Brazil (where we are now doing six projects) and India, where we have 14 jobs in various stages of design and construction.

How do you win commissions? Is it largely through competitions or more usually repeat client projects?

We win commissions overwhelmingly through repeat business and referrals. We do not enter competitions unless they are paid competitions and unless the project is extremely likely to go ahead and our chances extremely good in getting it.

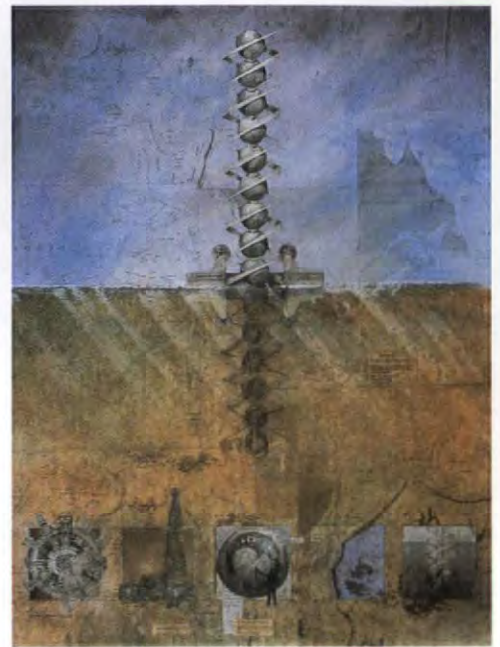
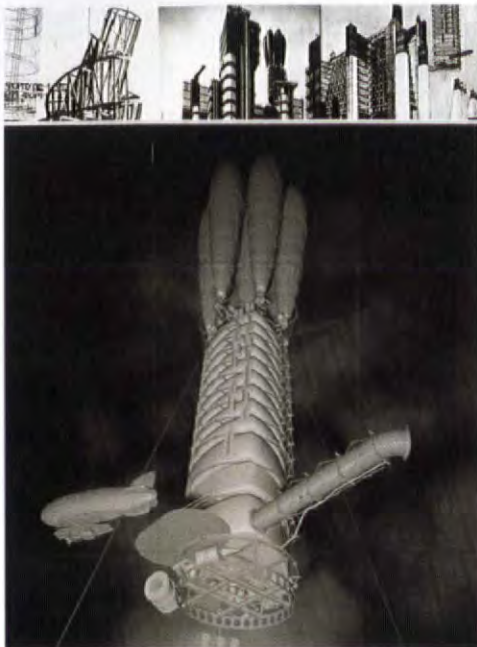
How important is it to design culturally-specific hotels? Is this what clients want, or are they more concerned with a corporate image? Designing hotels with a "sense of place" is integral to our philosophy. It is our opinion, and that of our clients, that when people travel they want an authentic experience of the place being visited. While some hotel companies opt for a more cookie-cutter, one-size-fits-all approach, those we work with value design which incorporates and celebrates elements that make a location unique. For instance, while we have designed over a dozen Hyatt hotels and resorts around the world, no two look alike.

Leisure travellers are looking for a very strong sense of place. They are seeking to experience the local culture and expect that experience to carry through into the hotel design. The business traveller, however, is more concerned with how the hotel will cater to his or her business needs: an office away from the

Below left Second place: Ikarus – Housing the Air; Silesian Technical University, Gliwice, Poland; Przemysław Godycki, Wojciech Gwizdak; Michał Kaczmarzyk; Mikołaj Machulik, Piotr Ozana. "This dirigible-inspired floating hotel is suspended in the air with helium-filled balloons and walls."

Below centre Third place: Citescape; Ball State University, Indiana, USA; Emily Fisher. "Designed as a prototype for what is possible in any urban environment, this hotel utilises

the structural framework of an existing vacant building. Prefabricated room pods hang from the structure by cables, surrounding a large atrium." **Below right** Citation: Raising Atlantis; Virginia Tech, USA; Derek Mott. "The hotel is a floating structure which raises and lowers into the water...visitors can gaze out at an island destination and then down to the ocean's depths, where time and reality lose their meaning...in it, they will have found Atlantis."



office; neat, clean rooms; and the latest in technology. We design experiences, not products...in fact even hotel companies are shedding their corporate image in favour of offering a service rather than a product.

Which is the bigger growth market, business or tourism? Is it possible to produce one hotel that adequately caters for the two together?

Our projections suggest that while business and pleasure travel are both increasing, the leisure market is expected to grow more rapidly, at least through the remainder of the century. An interesting trend that we have observed is that more and more people are combining business and pleasure travel. This is reflected in both the design and operations of hotels: business and convention hotels are adding recreational and family-oriented amenities, and resorts are adding conference and meeting facilities.

How has international hotel design progressed since the 1980s?

As travel has become more global, travellers' expectations have been raised. As a result, design standards have risen. Concurrently, more and more hotel operators have gone international and are striving for a higher and more consistent standard of excellence.

What is the potential of the lower-end two star hotels? Are you involved at this end?

While there is a great worldwide demand for

lower-end hotels, we are not involved in this end of the market. I suspect, since keeping costs down is critical to charging low room rates, they feel they couldn't afford us. We do, however, get involved in quite a few mid-range hotels and resorts. In several hotels, the star-rating, and therefore the room charges, vary according to the days of the week, or seasons. For example, one hotel in Bahrain (not one of ours) is five star at the weekend, and a two star business dorm for US marines on Tuesdays.

What is the extent of the retail potential of hotels? Do any of your hotels have shops?

The retail potential of hotels is significant. Shopping has become a leisure activity. In fact, it is the favourite pastime of 88 percent of international travellers, according to a survey here in the US. We therefore design retail into virtually all of our hotels. Duty free is the logical progression of this.

Are the majority of your hotels large international projects such as the Mandarin, currently under construction in Kuala Lumpur, or do you also design "boutique" hotels?

Our projects range in scale from 120 rooms at the Palacio Tangara in Brazil, to 3,300 rooms at the Sands Hotel in Las Vegas. They range not only in size but also in type, to include business and convention hotels, timeshare resorts, spa and wellness facilities, casino hotels, golf resorts, and historic city centre hotels (renovations).

What was the purpose of the Hotel of the Future competition? Are the ideas generated anything that you might consider in future design work?

The competition was a way to celebrate our fiftieth year in business by looking forward to the next 50 years. Rather than patting ourselves on the back for having reached this milestone, we decided to stimulate some creative thinking regarding the future. Specifically, we wanted to challenge people to think about why, how, and where people will be travelling in the next millennium. And how our future hotels and resorts support a traveller's desire for such transformative experiences as cultural enrichment, relaxation, education, rejuvenation and creative expression. Interestingly, we have several projects on the boards that come close to ideas that the students generated. One is a floating hotel that is virtually a "city at sea" – a quarter-mile-long vessel carrying over 6,000 people – three times larger than any passenger ship yet built. Another is an 80-room underwater boutique hotel. And we're also at work on the design of a hotel in space that would incorporate the adaptive reuse of the space shuttles' external fuel tanks. In the next decade, space tourism is likely to become feasible and affordable. Once up in space travellers will be seeking a destination. That's where we come in.

WA

Hotels – design trends and costs

Hanscomb Associates

Bold, brash and new in the 1980s, subtle, flexible and renovated in the 1990s. The form of hotel design is a valid indicator of the strength of the tourist industry worldwide. Hanscomb Associates sense that a boom in the international hotel construction market may not be far away.

Globally, tourism is the world's fastest growing industry and is predicted to be number one by the year 2000. In the United States the tourism industry is currently ranked third behind auto sales and food retail sales, and number two in terms of employment behind the health industry. In addition to hotels, the tourism industry includes a wide range of businesses, such as airlines, car rental firms, tour operators, all of which are interrelated.

The term "hotel" conjures multiple images in the mind's eye leading to several sub-classifications of this building type – resort hotels, suburban hotels, motor hotels, all-suite hotels, long-term stay hotels and other combinations. There is also a wide range of qualities, usually classified by stars from one to five, although the classifications are not always consistent between countries and regions.

Hotels in the 1990s

For most of the 1990s few new hotels have been constructed in North America, Europe or Japan, due to over-building in the 1980s. In fact, it has been cheaper to buy existing hotels than to build new ones, sometimes by a large measure. Thus, at these locations, most of the hotel activity has involved renovations and upgrades. Certain categories of hotels have however remained active, particularly budget all-suite and long-term stay residential hotels, usually built outside central business districts.

Hank Brennan, a partner in Brennan Beer Gorman Monk, a New York based international hospitality design firm, states that "new hotels are always going to be cost sensitive and

they are the hardest projects to make work financially. They [hotels] have a far higher risk than office and retail projects, where costs and revenues are generally more predictable. A hotel guest, after all, is not signing a ten-year lease, but hotels can be quite profitable if this is taken into account, and the hotel is properly programmed, located and operated."

Trends in new hotel designs of all kinds can best be observed by studying properties being designed and built in the world's most active

- Cost per unit of gross floor area (square metre of square foot)

The cost per room is understandably more variable, as the total gross built floor area will vary widely according to the type of hotel. *Table 1* shows approximate areas per room for different quality levels of city hotels. Note the following:

- The relationship between the number of guest rooms and other areas is not necessarily linear. While the number of guest rooms

"Hotels have a far higher risk than office and retail projects, where costs and revenues are generally more predictable. A hotel guest, after all, is not signing a ten-year lease..."

markets – Asia Pacific (particularly South East Asia), the Middle East and Latin America.

Brennan sees a lot of activity for new four or five star hotels in South East Asia. He notes that the principle design difference between US/Europe and Asia is that there are five to six restaurants in major Asian full-service hotels, as opposed to one or two in the US or Europe. In Asian hotels, food and beverage outlets make a great deal of money, as the local population utilise them extensively and hold numerous large functions at the hotels.

Cost characteristics

Hotel costs are traditionally cited in two ways:

- Cost per room (or per key)

is important in determining the ancillary space provided, there is a staircase function to this and local market forces are a factor.

- A typical net-to-gross factor for the guest room block (adding for corridors, elevators, stairs, linen rooms, vending area and storage) for a higher grade hotel is approximately 1:1.5. It can be 1:1.6 for a single loaded corridor design, or as low 1:1.35 for highly efficient hotels.
- While the net floor area of the guest room is the single biggest component, the quantity of space for restaurants, bars, function and back-of-the-house areas will contribute the greatest variation to gross floor areas between hotel grades. A rule of thumb is that the guest

Table 1: Approximate areas per room (in square metres)

	2 Star	3 Star	4 Star
Guest Room Net Area	18.0-26.0	26.0-31.0	31.0-34.0
Guest Room Block Gross Area	22.0-30.0	34.0-42.0	42.0-49.0
Public and Function Areas	2.0-2.4	6.3-7.7	9.3-14.0
Back of House	2.8-3.8	4.2-5.2	6.0-8.8
Administration	0.2-0.5	0.6-1.0	1.2-1.6
Total Gross Floor Area	27.0-36.7	45.1-55.9	58.5-73.4

Table 2: Hotel unit costs by classification

US\$/square metre	2 Star	3 Star	4 Star
over \$2,500	Japan	Japan	Japan
\$2,500-\$2,000		Germany	France, Ireland, Germany, UK
\$2,000-\$1,500	Germany	Sweden, France	Australia, New Zealand, Sweden
\$1,500-\$1,000	Australia, France, Sweden, New Zealand	Australia, Belgium, UK, New Zealand	Netherlands, Belgium, Spain, USA
\$1,000-\$500	Belgium, Canada, UK, USA, Mexico	Canada, Mexico, Malaysia, USA	Greece, Canada, Malaysia, Mexico, Portugal, Thailand
less than \$500	Malaysia, Thailand	Thailand	

room areas generally account for 65% to 75% of the total floor area of the hotel.

Unit construction costs are influenced by the usual factors such as building height, configuration and site conditions. Costs are also affected by the addition of special features such as an atrium. Atriums lead to the use of single loaded corridors, upgrades to wall and balcony finishes and larger areas to be heated and cooled. Other issues influencing costs include the level of soundproofing required, extent of balconies, type of mechanical system, and whether integral structural parking is required.

Table 2 shows some hotel construction costs recently reported. These costs provide an approximate guide only. They exclude land, design and management fees, furniture, furnishings and equipment, site work, financing, and project-opening costs. Value-added tax is also excluded.

FF&E (furniture, furnishings and equipment) expenditures are highly sensitive to the type and class of hotel. They may range from less than US\$15,000 per room for a budget hotel to over US\$50,000 per room for a luxury hotel. Figure 3 shows how FF&E costs might be split for a three star hotel.

Finally, to the developer, it is the total capital cost that matters. Construction costs (excluding FF&E) can often be less than 50% and are rarely more than 65% of the total costs.

Design trends

There are trends in guest room design that are affecting construction costs. Sandra Cortner, Senior Associate of Hirsch/Bedner Design, an

Atlanta-based hotel design firm, says that she sees trends in interior design being driven by three factors:

- Many of the new fiscally conservative business companies are not going to pay for hotels with a full range of amenities.
- The rising cost of labour is forcing hotels to find ways to stabilise or reduce this impact.
- Changes in lifestyle, technological innovation and cost control are major factors driving hotel design trends.

As an example of lifestyle influence, Cortner cites the need for a more casual and relaxed hotel atmosphere. This is translated into a strong emphasis on bathrooms and dressing areas, the most expensive construction space in a hotel. Guests now require upgraded fixtures and finishes and demand four fixtures per bathroom – separate shower, bath, basin and toilet. "It's a space game to fit in both the shower and the tub. The tub is now perceived as a luxury, as opposed to a necessity". However, several new and renovated hotels are in fact eliminating the bath. The technological impact is perhaps the most interesting. With more time being spent in the room, it must accommodate sleep, work and lounge areas. Work demands in-room faxes, multiple phone lines, computer data ports, and (coming soon) interactive televisions.

The more technology on display in the rooms, the more the design of the room is impacted. The problem is how to adapt traditional furnishings to the new equipment. In addition, the room must be kept comfortable and residential. One response has been the all-suite hotel, where sleep, work and lounge areas

are kept quite distinct and separate.

Cortner also says that technology is influencing the design and cost of other parts of the hotel. There is a trend to install communication centres, which merge concierge and business centres. When combined with the increasing level of technology in guest rooms, this removes the layers of hotel support staff and the space which is need for them.

Also impacted are banquet and meeting room designs. For a period there was a trend toward designing specific teleconferencing rooms, but that became economically unfeasible as the technology changed. Most hotels are now installing flexible communications frameworks that can accept changing technology, and are now using outside speciality companies to come in and set up temporary systems as needed.

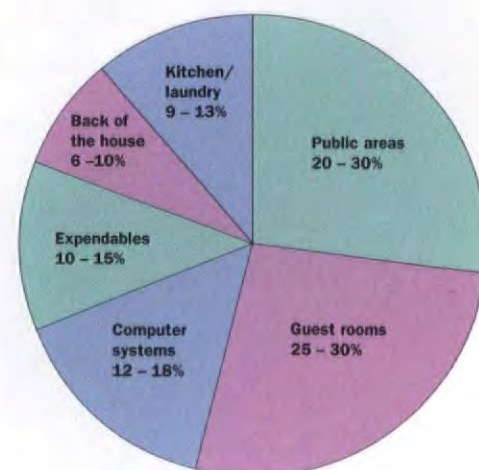
Other design trends affecting construction cost include:

- Enhanced security
- Concierge, executive and club floors
- Addition of well-equipped business centres
- Health clubs

Conclusion

Given the fast growth of the tourism industry and the gradual improvement in occupancy rates evident in most of the over-built regions of the world, we can expect to see a steady and increasing level of investment in hotels of all types. When linked with a reducing cycle of renovation and refurbishment as hotels respond to changes in demand by their customers, this presages a sound market for the construction industries of the world.

WA

Table 3: How FF&E costs are spent (% of total FF&E)



Opposite page Kisho Kurokawa's design for the 15-storey Kyocera hotel in Kagoshima, southern Japan, combines international demands and Japanese traditions in recognition of the architect's 1959 prediction that "we would shift from an age of the machine principle to an age of the life principle". Its elliptical, anthropological form is in contrast to the powerful delineation of the conventional international hotel. **Right** The form and location of the hotel takes full advantage of the view of the Sakurajima volcano, and Kagoshima Bay

Hotel Kyocera Kagoshima, Japan

Kisho Kurokawa applied his design philosophy of metabolism to produce a design for a hotel which would bridge the gap between Japanese traditions and international demands. In 1959 Kurokawa predicted that "we would shift from an age of the machine principle to an age of the life principle". That principle is gradually coming true. Certainly, the capsule hotels of the 1960s and 1970s reflect a utilitarian "mechanical" view of hotels, a view that no longer meets the demands or expectations of the Japanese population.

The boom in business hotels has spread all over the nation, reaching as far south as

Kyushu, one of the most picturesque areas of the country. Kurokawa's simple and efficient elliptical volume is 60 metres tall and is comprised of 15 storeys – two of which are underground – providing a strikingly assertive contrast to the chaotic, predominately low-rise, urban environment.

The elliptical form of the building is based on the idea of two loosely clasped hands, evidence of Kurokawa's employment of "anthropomorphic analogies", to illustrate his preoccupation with life principles. "I have always employed the concepts and vocabulary of life systems, biology and ecology. This was a conscious choice on my

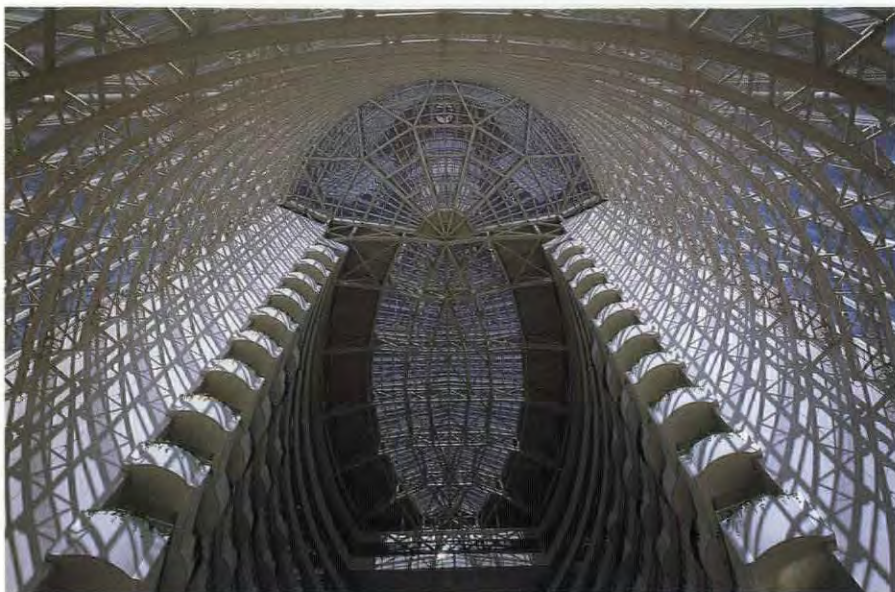
part to encourage the transformation to a non-mechanical age".

The form of the hotel takes full advantage of the spectacular view of the Sakurajima Volcano, across Kagoshima Bay. The volcano can be seen through the hotel's transparent facade, where Kurokawa introduced his signature concept of "ambiguity", between the interior and exterior. This was achieved principally through the atrium which extends the full height of the hotel, from the entrance lobby to the top floor.

Kurokawa's sensitivity towards traditional Japanese hospitality can be seen in the prayer



Photographs on these pages by Tomio Ohashi

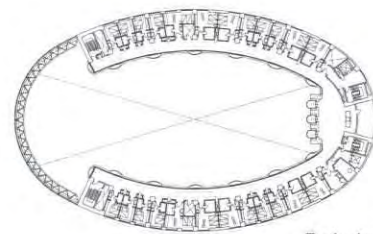
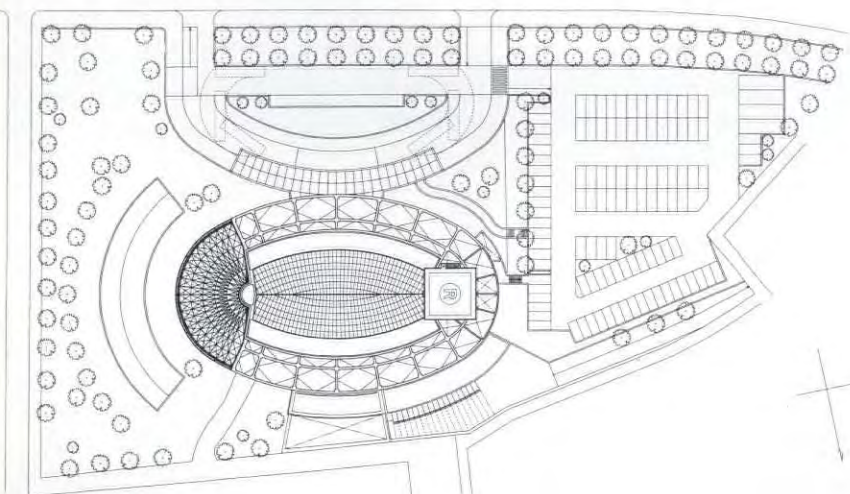


Tomo Ohashi

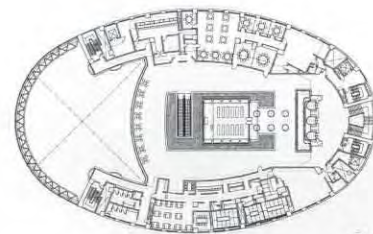


Nishimura Shabou

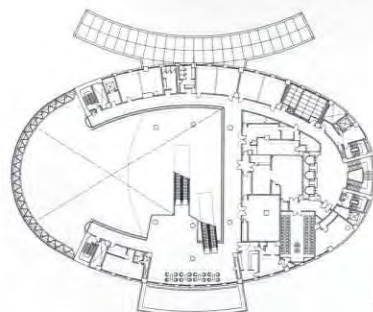
Top A principal feature of the hotel is the full height atrium which allows Kurokawa to further explore his concept of "ambiguity" – between the interior and exterior – and to illustrate the idea of the structure being based on the form of two loosely clasped hands. **Above** Aerial view demonstrating the extent of the transparent facade and form of the structure. **Below** Site plan



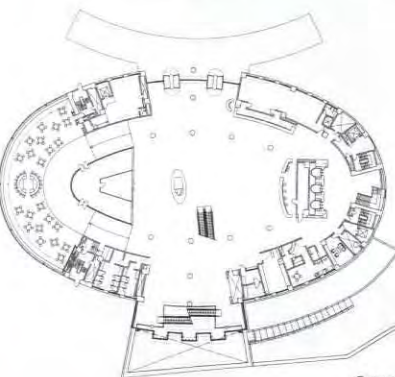
Typical upper floor plan



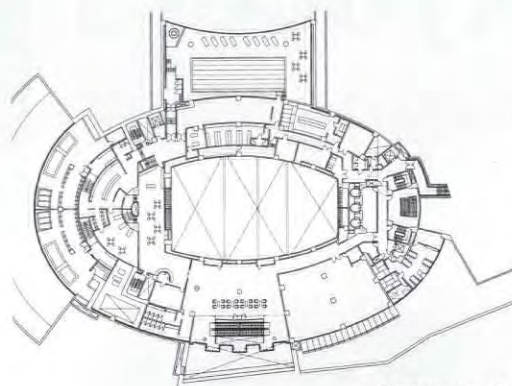
Second floor plan



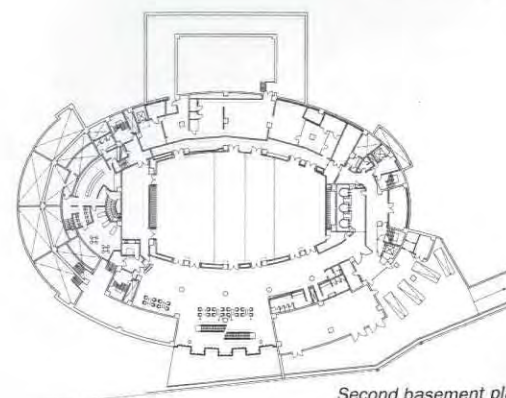
First floor plan



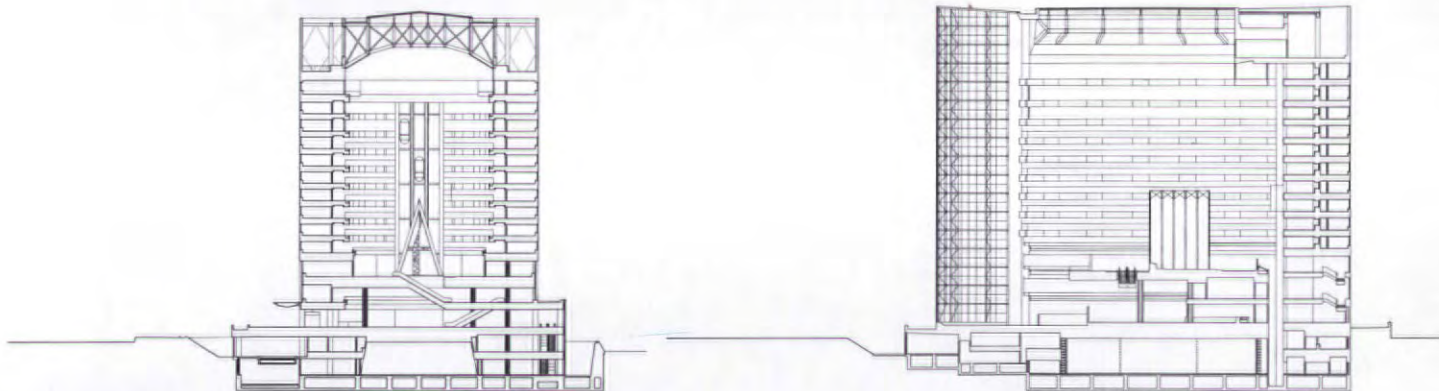
Ground floor plan



First basement plan



Second basement plan



chapel of coloured glass, in the centre of the entrance lobby, that represents the spirit of love and fraternity required by the client, the Kyocera Development Company. Notions of identity are a consistent theme in Kurokawa's work. At the Kyocera it was his wish to illustrate the national context of the building through its form and content, in a manner intelligible to foreign guests.

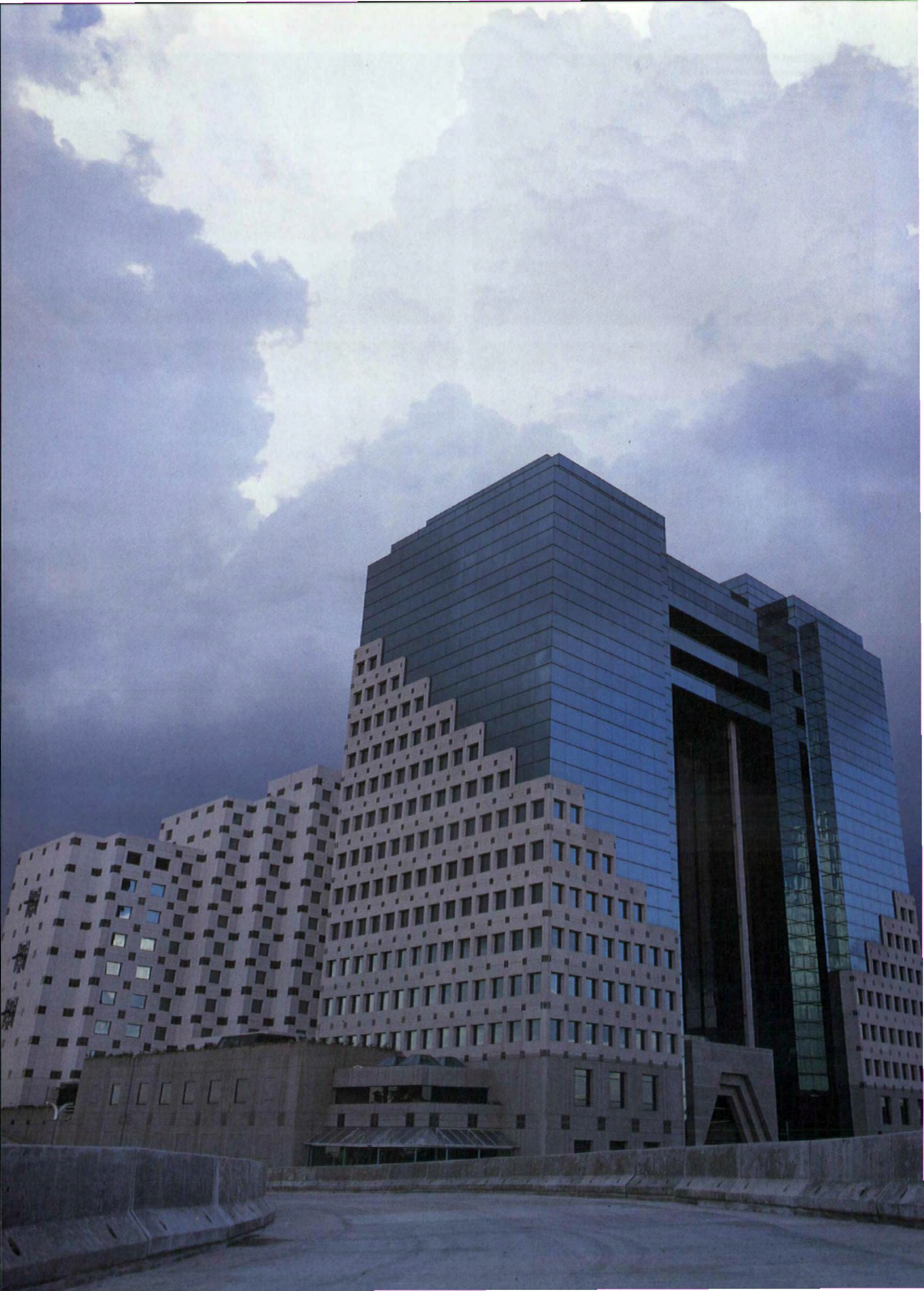
Though Japanese in spirit the Kyocera Hotel actually functions as an "international" hotel, in the sense that it is designed to support both local businesses and business men arriving along the South East Asia route. Middle income Japanese want international standard

entertainment and accommodation facilities for their vacations, and particularly relish the generous space standards of the hotel rooms, which at 20 square metres are far larger than average hotel rooms in Japan.

One of the chief roles of the Japanese hotel, according to Kurokawa, is to provide a high profile public space for social functions. "The biggest market is for conventions, parties, weddings and banquets. Business demands come after that." Despite this the Kyocera is a hotel with something for everybody, not least Kisho Kurokawa who has achieved his aim of combining technologically astute modernity with a human-scale national spirit. **WA**

Clockwise from above left Speciality steak restaurant, indicating the international outlook of the hotel; first floor entrance lobby housing "solar car"; lounge on the thirteenth floor, one of the hotel's numerous function areas and public spaces; east-west section; north-south section; a typical, generously proportioned bedroom suite

Project	Hotel Kyocera
Client	Kyocera Development Company
Architect	Kisho Kurokawa Architect and Associates
Engineers	Inuzuka Engineering Consultants
General Contractor	Taisei Corporation



Opposite page and below Two local Guatemalan architectural firms, Pemueller and Cohen Arquitectos and David Garda, Taller de Arquitectura have just completed a pyramid-shaped hotel complex which takes its form from local Mayan ruins. The business orientated, multi-purpose complex – including retail, exhibition and convention spaces – is the first of its kind in Central America

Hyatt Regency Guatemala Guatemala City

Architects Pemueller and Cohen Arquitectos and David Garda, Taller de Arquitectura

Photography Ange Bourda

The latest addition to the Hyatt chain is opening this month in Guatemala City. Two local architectural firms, Pemueller and Cohen Arquitectos and David Garda, Taller de Arquitectura have designed a pyramid-shaped hotel complex known as “Tikal Futura” – after Tikal, the famous Mayan ruins in the jungle to the north of Guatemala. Hyatt were only involved with the project in the last six months – up until when it was run by Mission Park Plaza.

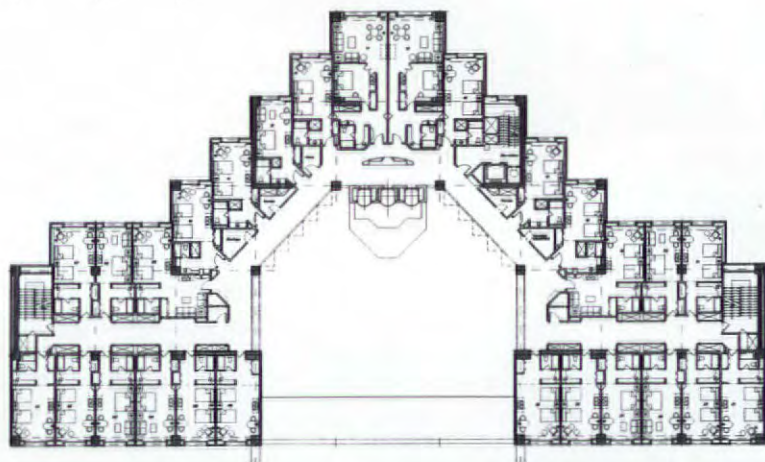
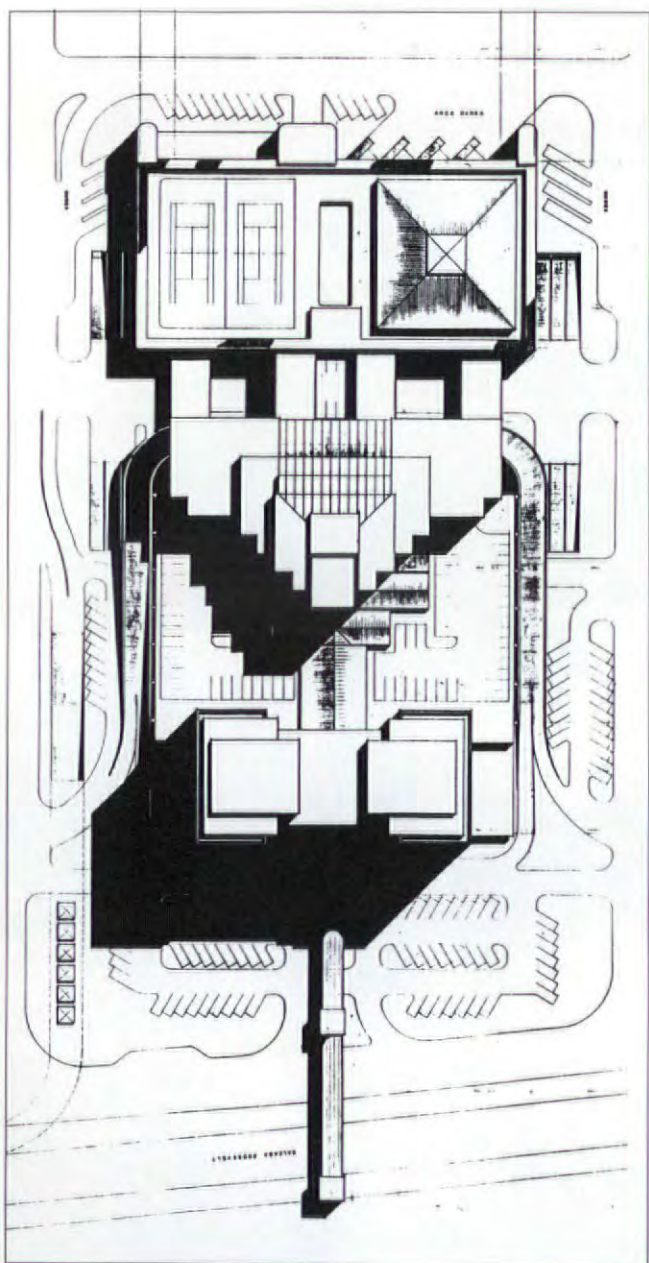
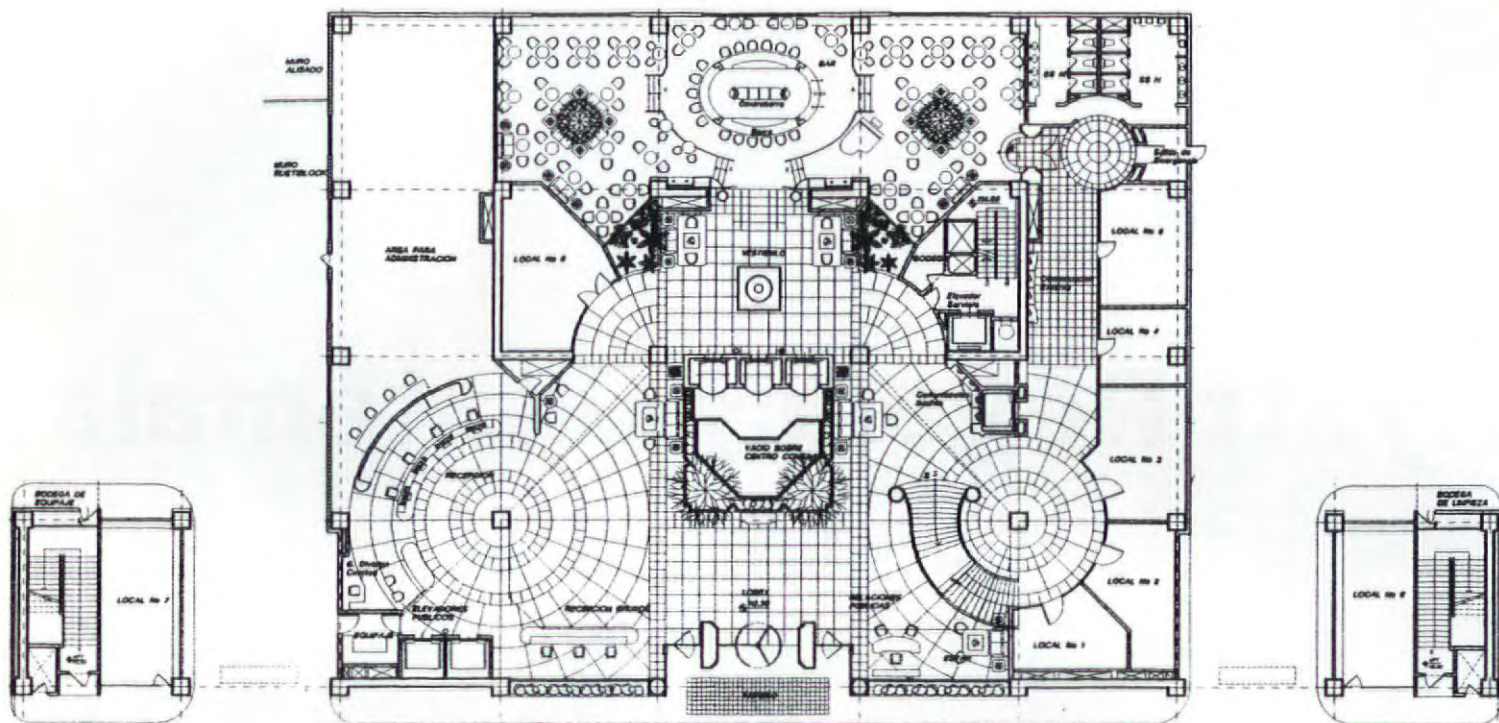
The basic concept of the owner, the Tikal Futura Corporation, was to demonstrate how the Mayans might have designed if they had been building in the latter half of the twentieth century. The final form is reminiscent of Tikal, with pyramids rising out of trees reflecting the hotel’s location in the city’s “green belt”.

This is the first complex of its kind in Central America. The two towers nearest the road contain 80,000 square meters of office space –

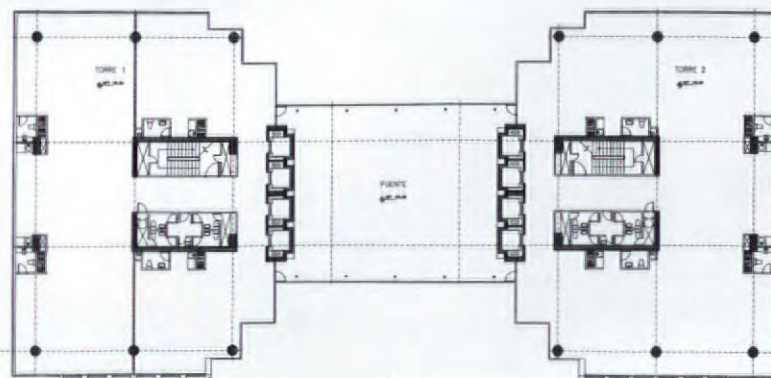
80 percent of which has already been let – and 12,000 square meters of retail space, all of which had been let to both local and international shopping outlets well before the building was completed.

The hotel is only one section of this giant complex. Three glass elevators in the atrium lobby take guests past carved Mayan figures in an effort to combine a local atmosphere and national design with a hi-tech, luxury hotel.





Top First floor plan showing the circular retail spaces beneath office towers which are custom designed: Children's World to the left is on a smaller scale and Electronic World to the right is characterised by neon signage. The hotel at the back is entered through a spacious atrium. **Left** Site of Tikal Futura complex with the office towers at the bottom and the hotel in the middle and the convention/entertainment centre at the top. **Above** Fourth floor plan. **Below** Floor plan level 16 of the office block. **Opposite page** The bridge between the towers contains a restaurant which provides international cuisine





Interior decoration includes a mural by local artist Anna Maria de Segouia, depicting the history of Guatemala from the Mayans through to the conquistadors and up to the present day.

The Tikal Futura is aimed at both the international businessman and the population of this area of the city: the market for business guests is on the increase as Guatemala is considered to be one of the most highly developed countries in Central America. The projected Revenue Per Available Room (REV PAR), of approximately US\$54 for 1996, is better than that of any other Central American city. Capitalising on the growing demand for convention centres, the Tikal Futura contains the largest convention/exhibition area in Central America. It is

opening this month with a car show, and is already booked up well into the future. Both this space and a ballroom can be divided into sections for meeting rooms. The architects have taken great care to ensure that the complex is earthquake-proof – a major priority since Guatemala has historically been blighted by this natural phenomenon.

The complex is also designed to appeal to the local community as a multi-use complex which will house a shopping arcade on two levels with a food court and an entertainment centre, as well as four cinemas and a bowling alley.

The Tikal Futura is designed to be a “destination” in itself. Although it is not in the town centre, it is expected to set a precedent for multi-use complexes in Central America. **WA**

Project	Hyatt Regency Hotel, Guatemala City
Client	The Tikal Corporation
Architect	Pemuelier and Cohen Arquitectos and David Garda, Taller de Arquitectura
Structural Engineer/	
Project Coordination	Hector Monzon/Sismocult
General Contractor	Inmobiliaria Zorial
Interior Design	
Consultants	Arnoldo Ochoa/ David Garda Architects



Above Exterior view of the fourth Trump Casino Hotel in Atlantic City, USA. *Opposite page top* Artist's impression of the casino interior, at boardwalk level. *Opposite page bottom left* Elevation of the Skywalk Connection between the hotel and the casino. *Opposite page bottom right* Artist's impression of the Skywalk Connection interior

World Fair Casino Hotel

Atlantic City, USA

Developer Donald Trump
Architect David Jacobson

Donald Trump's enterprising forays into the property market have given him celebrity status, and so it should come as no surprise that he owns the most casino hotels in the world. Together with the architect David Jacobson, he has just opened the fourth Trump Casino Hotel in Atlantic City, the World Fair.

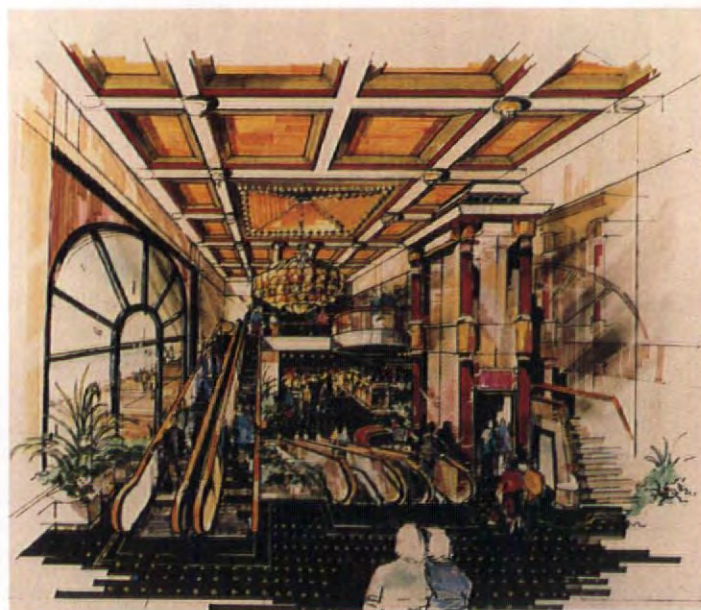
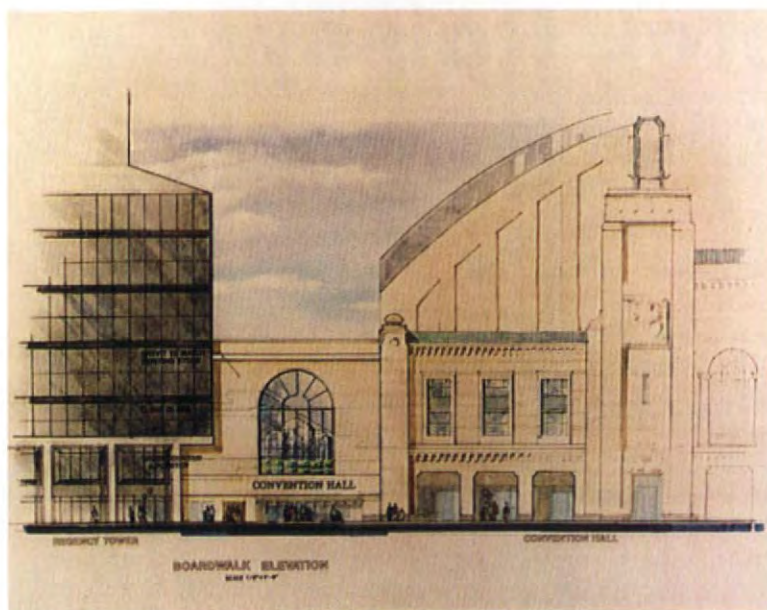
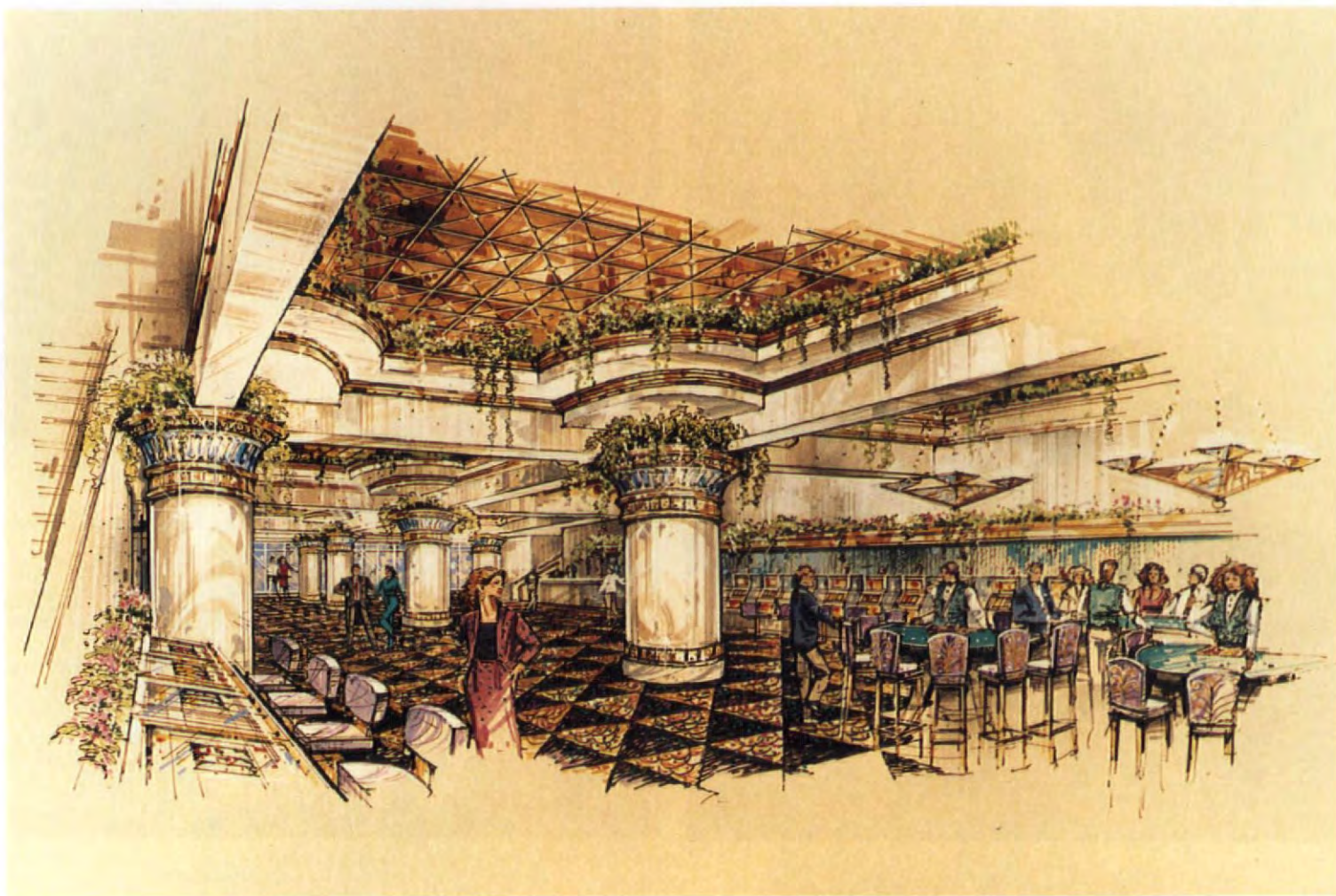
The World Fair "overlooking the boardwalk and ocean, is my latest venture in Atlantic City and is the first casino to open there since 1990. The only casino accessible directly from the boardwalk, it is connected to Trump Plaza Hotel and Casino by a glass enclosed walkway on the second floor of the Atlantic City Convention Center. Opened in May 1996 [it] offers 500 beautiful rooms, 1,460 slot machines and 32 table games". He goes on to say: "I have a reputation for having the best designed hotels, the most comfortable hotels, the best entertainment and hotels with the ultimate in staff, service and food. Our problem is we need more rooms to accommodate all those who want to visit a Trump property."

"The first time we met in his office" says Jacobson, "he said 'I want you to realise I am

not a publicity seeker I am trying to keep a low profile'. I was surrounded by tables and benches covered in press cuttings about Trump." David Jacobson has been designing casinos and hotels since 1956 when the firm was first established in California and Nevada. Jacobson has provided design services on a total of 11 of the 13 Atlantic City casinos.

The World Fair Casino Hotel has been created from an existing 1979 building owned by *Playboy* and built by the architect Martin Stern. "We have barely altered the existing exterior: new canopy and new signs. Stern's building is glass and metal – it is not playful. In fact [it's] rather severe, but no point replacing it because [it's] still in shape." The restoration has been sensitive however. An adjoining 1920s colonnade, listed by the New Jersey State Historic Register, retains the elegance of the East Hall's elevation by enclosing the colonnade within a 36 foot-high structural glass wall.

The deregulation of Atlantic City in 1976 led to a rush of casino developments. Further changes in regulations last year have led to the exposure of the ground floor level of the



50,000 foot casino to the boardwalk since the owner is no longer required to hide what everyone already knows; that behind the shops and food emporiums facing the boardwalk is hidden one of the many casinos that directly employ over 40,000 people and serve over 32 million. "We have brought the casino down to retail level rather than having it out of reach, 24 feet up on the first floor," Jacobson explained, "and yes, it has considerably increased our turnover".

"The secret of building casino hotels is

'themeing'. Beyond that it must work well as a very complex mechanism for the business itself. Visitors, guests and the employees. The casino hotel goes 24 hours a day...It is like a hospital only more so. Departments have a flow pattern like supermarkets. Things that you have to get at the back...and the things that you need at the front."

Despite Trump's success Atlantic City architects are looking forward to the rumoured arrival of investors like Ronald Perelman, Marvin Davis and Mirage Resorts' Steve Wynn. **VA**

Project	World Fair Casino Hotel
Client	Trump Plaza Associates
Architect	David Jacobson Associates P A
Civil, mechanical and electrical engineers	L Robert Kimball Associates Inc
Structural engineer	Cooke/Charles Associates P E



Paul Maurer



The Sheraton Hotel, Roissy

Roissy/Charles de Gaulle Airport, Terminal 2, France

Inaugurated in January 1996, the 256 room Hotel Sheraton, Roissy is located in the heart of Charles de Gaulle Airport, Terminal 2, just above the TGV (high speed) and RER (regional) train stations. The hotel comprises the upper element of the *Module d'Echanges*. The exchange module offers every possible permutation between the different modes of transport: the lower part of the module houses the TGV and RER stations, connecting the airport with the rest of the Paris area; the intermediate levels provide access to the different terminals, either by travelator in Terminal 2, or by temporary bus in Terminal 1 (a mono-rail, due to be completed in 1997, will eventually connect the TGV, the remote car parks and Terminal 1); the remaining four levels house the hotel itself. Despite the density of the brief, and the complexity of the site, Paul Andreu's intention was to make the hotel accessible and intelligible to the user.

The large glass domes covering the tracks clearly mark a north-south orientation, whilst the spindle-shaped hotel follows the east-west implantation. The Sheraton interrupts the flow

of the road network, forcing its path to blend with the form of the adjacent terminal.

The hotels reception, and other amenities – restaurants, bar, shops – are located within the exchange module, on the route logically taken by travellers connecting between a train and a plane, or between two flights. The four levels at the top of the building house only guest rooms. The hotel is centered around an atrium lit naturally from both the top and the bottom, just above the train station.

'The atrium focusses the light towards the point where the passengers converge, before separating again, thus reinforcing the central role of the building, and emphasising the transparency of the structure.

Noise filtration has been achieved through the use of twin anti-noise frames, eliminating all exterior sound, and by having the hotel itself mounted on spring boxes that filter the vibration from the ground.

Paul Andreu has designed a building with its own identity and presence within a very complicated context. This identity was reinforced by the interior decoration, by Andrée

Putman. She sought to produce a simple, striking design, that would also recognise the fact that an airport hotel will never be a "home-from-home", but a place of temporary convenience. Shades of blue in the rugs and upholstery of the public areas symbolise the sky, so evident in the central atrium. The use of brown wood harmonises with the blues and beiges of the corridors to create a sense of the natural outdoors in an intensely modern, dynamic setting.

The furniture used in the guestrooms themselves is not unusually striking, yet has a unique quality. Putman wanted to show the guests something that they would not use everyday; such as a round shower recess, or a wardrobe located next to the window. **WA**

Project	Hotel Sheraton, Roissy
Client	I.T.T. Sheraton
Architect	Paul Andreu, head of design for the exchange module/stations and hotel, with Anne Brison (ADP)
Main contractor	Richard Martinet, architect (CBC)
Interior conception	Andrée Putman

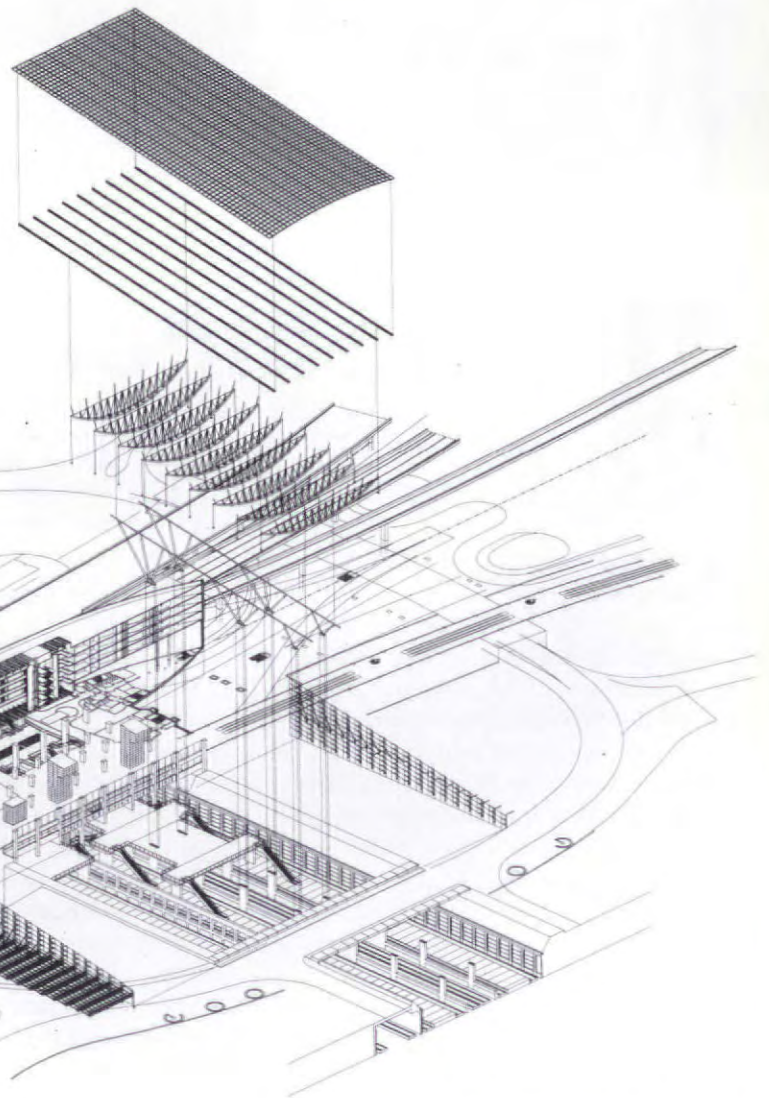
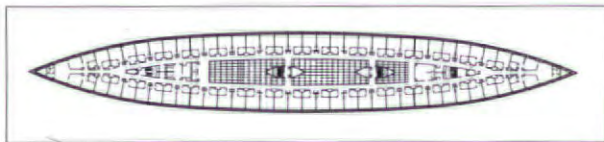


Paul Maurer



Paul Maurer

Opposite page left The spindle-shaped hotel lies east-west in the heart of Charles de Gaulle Airport, Terminal 2. The top four levels house guest rooms. **Opposite page right** The Sheraton interrupts the flow of the road network, forcing its path to blend with the form of the adjacent terminal. **Above** The intermediate levels of the exchange module offer access to the different airport terminals, TGV and RER trains, as well as the Sheraton itself. **Above right** The hotel is centred around an atrium lit naturally from both the top and the bottom, just above the train station. **Below** Overhead view of hotel level floor plan. **Bottom** Cutaway axonometric projection of the exchange module





The Hempel

Bayswater, London

Architects: Anouska Hempel/AHD

Photography: Kim Zwarts

Anouska Hempel's Chelsea hotel, Blakes, established the cult of "boutique" exclusivity in the British hotel market. Anouska Hempel and AHD – a group of young architects and designers selected by Hempel – are about to open a second hotel, The Hempel, which unlike the cosy eclecticism of Blakes, speaks of "the millennium: of clarity, parity and peace".

The Hempel is owned by a giant Japanese investment company which also owns the hotels and houses around the square, and has been created by combining five stucco houses in Bayswater, London. The design team have

used their skill and experience to bring Anouska Hempel's ideas to life.

The white anteroom, completely bare but for 81 white orchids, leads through into the atrium space which rises the five-floor height of the building. Around the atrium, the subtle combination of screen walls and long low fireplaces are surrounded by sunken seating. White meeting rooms are entered through plain, heavy white doors on a central pivot providing contrast with the original "Bayswater" windows, retained in the outerwall. The floor of the basement dining room is varnished a silky black

contributing to the "swimming pool" theme, indicated by the suspended walls alternating with transparent screens and the diving board.

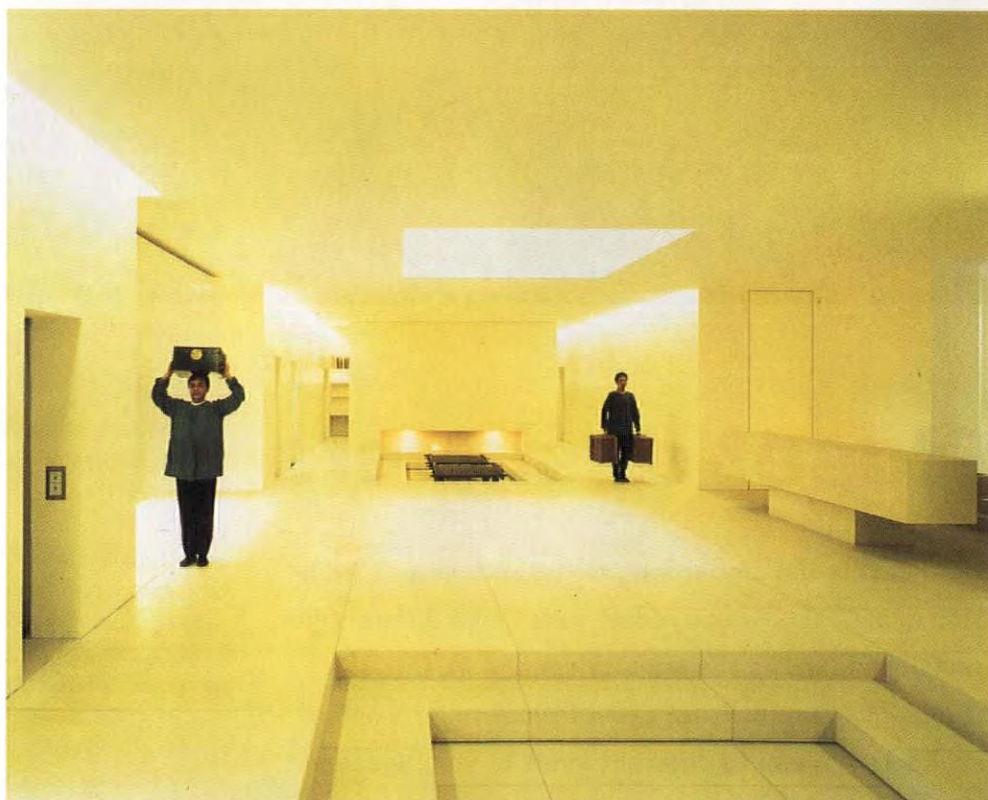
The bedrooms are located along plain white corridors. Room numbers are projected onto the hearth by overhead lights, and the keys are activated by a central computer. Where the corridors pass the atrium, the far wall is to be treated as a screen creating movement and variation through projected images of "anything from Marlene Dietrich to railways". Each of the 52 rooms is a different interpretation of the same theme of white, orchids and natural fibres combined with



Opposite page "Clarity, parity and peace". The stripped-down minimalism of the Hempel Hotel is in stark contrast to the cosy eclecticism of Hempel's Chelsea hotel, Blakes.

Above Bedrooms are located along plain white corridors.

Above right The interiors of all the 52 rooms are variations on the theme of white, orchids, natural fibres, fax machines, mobile phones and fibre optics – to light up the tap water at night. **Right** The purity of the regular forms both in the interior meeting areas and the exterior "Hempel Garden Square" (not pictured) are "absolutely in harmony and representative of each other"



fibre optics – to light up the tap water at night – fax machines and mobile phones.

The south facing rooms look out onto a square, now christened Hempel Garden Square, where the outside space has an integral role to play with the building. "Inside and outside are absolutely in harmony and representative of each other" explains Anouska Hempel. "The square has been designed as a huge Zen carpet, great white gravel, huge round stone balls, three enormous squares of grass, three ponds in the centre. Raking gravel inside simply proved too difficult".

WA

Project	The Hempel
Architects	Anouska Hempel/Anouska Hempel Design – Hugh Tuffley and Russell Jones
Documentation	Jestico & Whiles
Main contractor	John Sisk
Structural engineers	Trigram
Quantity surveyors	Leonard Stace Partnership



Closet designers

Whether it is the cloakroom, closet, washroom, bathroom or WC, the “small room” takes on a different persona depending on the country you are in. But although varying cultural expectations and technical requirements lead to different kinds of facilities, and fashions come and go, the basic elements of the bathroom remain the same. This has given the architect a certain amount of freedom, whether it is in creating bespoke facilities or in designing a complete range for production. Nicky Churchill investigates.

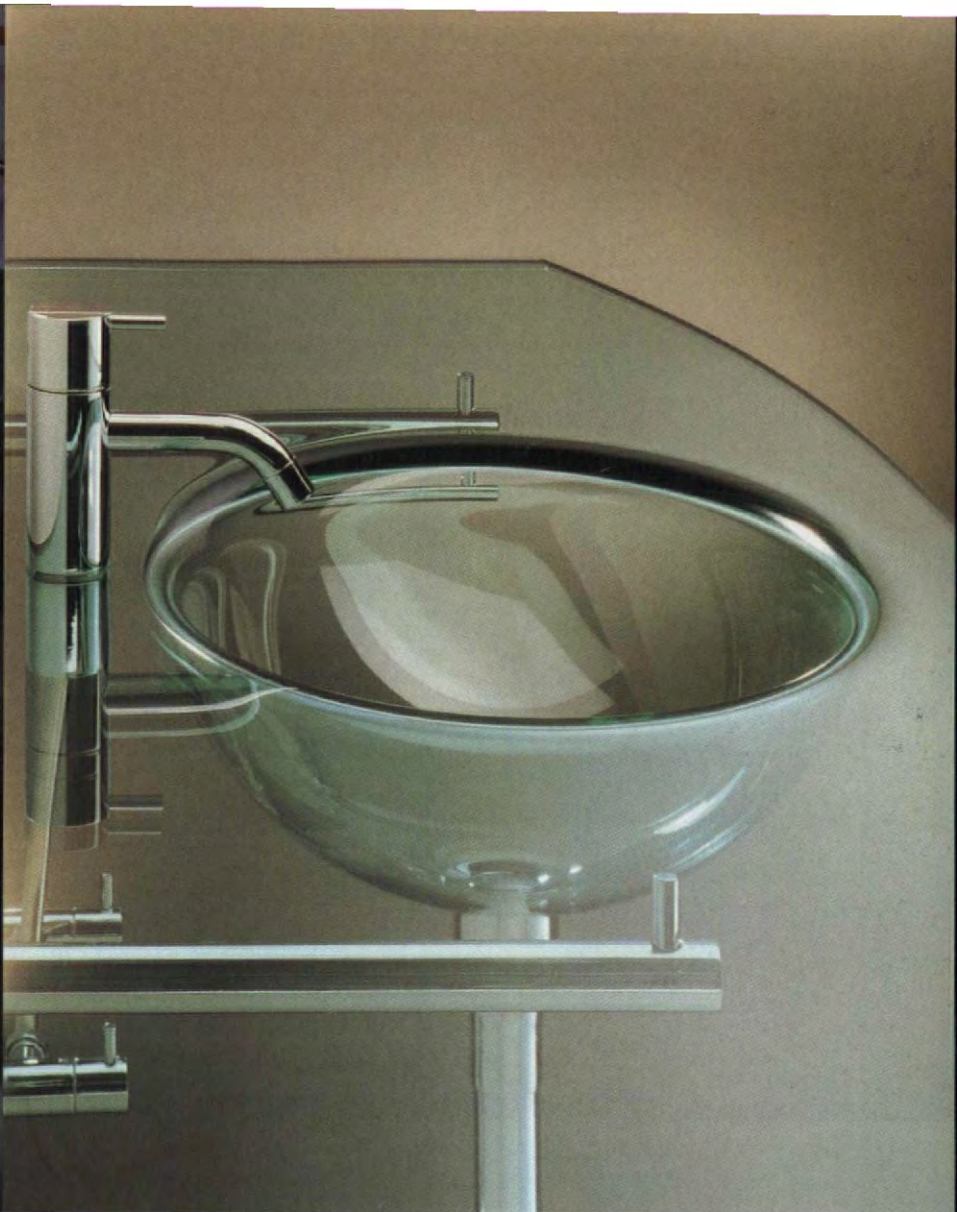
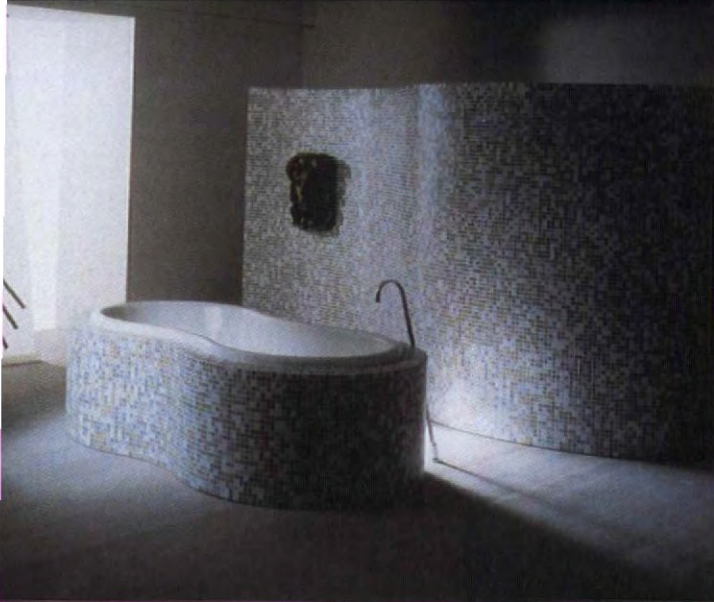
The manufacturer is always the first to agree that designing sanitaryware for mass export is a difficult process. And it is not just a technical problem. The average required size of the bathroom varies greatly from country to country. Styles are different too – art deco or the latest designer hi-tech? And the average consumer has become accustomed to an enormous range of choices – avocado, sage or lime green?

For the commercial market things are somewhat simpler. Space requirements and the shape and size of the bath, basin and toilet have stayed more or less the same, the materials used haven't changed much (though the introduction of stainless steel was a welcome hi-tech addition), and white remains the most popular colour. Over the last decade or so, this combination of non-events has culminated in a number of one-off, up-market facilities where designers have used natural materials, bold splashes of colour and bespoke plumbed fittings to great effect.

It started in the early eighties, when

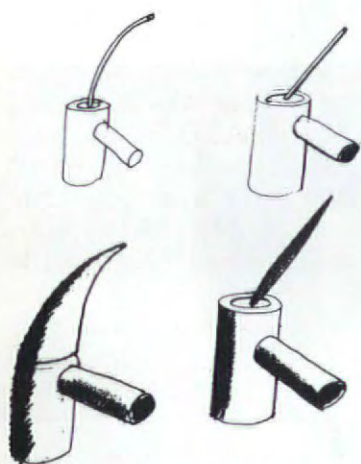
Parisian cafe society was treated to Café Costes by Philippe Starck. It became the place to go and be seen, with its grand staircase and stylish furnishings providing the perfect atmosphere for the Parisian trendsetters. Tucked away beneath the staircase below the giant clock was the entrance to the public facilities. At the time, the design of the bathrooms was so radical that people were either scared to use them or spent hours hunting for the controls. But they became a talking point. Sadly Café Costes is no longer with us (the last I heard it was a jeans store), but it certainly set the standard for the decade.

Since then, there has been a continuing trend towards bespoke and innovative bathroom design mostly for the restaurant and hotel market. The surge in “designer” bars in Barcelona in the late eighties provided many an architect with a multitude of opportunities – Eduardo Samsó at Nick Havanna and Dani Freixes and Vicente Miranda at Zsa Zsa to name but two. The growth in the mega-restaurant scene in London



Opposite page Philippe Starck's Felix Restaurant on the top floor of Hong Kong's Peninsula Hotel. **Above from top** The deep Kusatsu-Pool in red cedar designed by Sottsass Associati for Kaldewei; the Rotonda combined bath and shower with the tap protruding out of the floor to lean against the tub like a walking stick. **Above right** Vitraform counter sink with integral bowl in clear polished laminated glass, shown with Vola HVI basin mixer. **Right** Complete range designed by Gio Ponti for the Italian branch of Ideal Standard





Top Starck's complete bathroom designs for Duravit, Axor and Hoesch. **Above** The development of the Axor single lever tap which culminated in the final product, **(right)**. **Far right from top** The colourful Diesis range, and the streamlined Class series designed by Mario Bellini, both from Ideal Standard





has produced bespoke facilities at Quaglino's and Mezzo by the CD Partnership, and Belgo Centraal by Arad Associates. And as one would expect, Starck himself has been kept busy with interiors for hotels in New York and Miami, and restaurants in Tokyo and Hong Kong.

There is no disputing that these spaces are a sight to behold and are often something of a shock to the general public. And it will be interesting to see whether they stand the test of time. But the general public are quite rightly more concerned with what the manufacturer is doing to brighten up their bathrooms.

As with furniture design, it has traditionally been the European companies that have been at the forefront of development, producing exciting, often radical designs for the adventurous home owner. Gio Ponti, a major force in twentieth century Italian design and founder of the leading architectural and design magazine *Domus*, was one of the first architects to receive a commission, some 40 years ago, from the Italian branch of Ideal Standard. Here was a manufacturer that understood the need to get modern, well designed products onto the market turning to someone that not only

shared this vision but also, by the nature of his profession, inherently understood the mechanics of the bathroom. Undoubtedly commercialism also came into it alongside the realisation that an architect was more likely to specify a product designed by one of his own kind. But the theory paid off and Ideal Standard Italy continued over the next 25 years with products by the likes of Mario Bellini, Achille Castiglione and Gae Aulenti. Many were solely for the Italian market and many are still in production today, such as the Aquatonda and Linda products by Castiglione. Others, such as the hugely successful range by Paolo Tilche, were exported throughout Europe and America. (Interestingly, Paolo Tilche's range was given a different name in each country to suit the various cultural expectations.)

The contribution being made by designers today is still significant and the bathroom is yet again being given a new lease of life. New materials are being explored, such as polished or frosted glass, and designers are experimenting with new forms. The Premium series of bath tubs by Sottsass Associati for Kaldewei, for example, introduces the deep Kusatsu-Pool based on the 1,000-year old bathing culture of

Japan, and is made from red cedar. And the Rotonda combined bath and shower from the same range has been designed to accommodate two people. Also after more than a decade of do-it-yourself, Philippe Starck has also realised his "complete bathroom" with his designs for Duravit, Axor (part of Hansgrohe) and Hoesch. These products are noticeably different and draw inspiration from simple objects associated with water – the wash tub becomes the bath, the washing bowl becomes the basin and the hand pump turns into a single lever mixer tap.

Perhaps surprisingly, the bathroom tap does not travel well – some prefer the traditional cross-head handles while others stand by the single lever mixer. But despite this and the advance in installation methods and plumbing, there are some ranges which have stood the test of time and have been successful on a worldwide basis. None more so than the classic Vola range designed by Danish architect Arne Jacobsen more than 25 years ago, and still a favourite among architects today. Its uncompromising slender design compliments both radical styling and classical surroundings, and although new models have been introduced, the basic

shape has remained unchanged since its conception. The internal components have developed however, keeping pace with modern construction techniques and new requirements such as water-saving devices. Interestingly, Starck also went for a slim construction when he designed the single lever mixer tap for Axor. It too is an elegant object, but one that posed the biggest technical challenge to the production team due to the narrow body and the lever mechanism.

Design awareness in this sector continues to evolve. Paolo Tilche continues his work with Ideal Standard in Italy, with a new range recently launched at Cersaie, and Foster and Partners are currently working with Italian manufacturer Stella to produce a new range of taps. In France, Le Centre de Recherche sur les Arts du Feu et de la Terre held an event earlier this year to promote the use of ceramics (see Ron Arad's design for Allia in this issue). And German manufacturer Hoesch has recently announced details of the First Hoesch Design Award "Bath of the future", a competition open to students and young designers and architects. The deadline for entries is 31 December.

WA

Four vases do not make a bathroom

An interview with Alexander Kira

Tim Ostler talks to a man with a fearless approach to tackling the traditional taboo of designing bathrooms and the products that go in them. This year his timeless classic, *The Bathroom*, celebrates its thirtieth year.

In the fifties it was Alfred Kinsey. In the sixties it was Alexander Kira. Both of them in their time published reports about things that everyone did but was nevertheless shocked to find someone actually writing about. Kira's *The Bathroom* – regrettably now out of print – enjoys its thirtieth anniversary this year. It earned its reputation because for the first time it treated the most basic human functions as an activity like any other, to be analysed and designed for, in purely ergonomic terms.

Kira later summarised a key finding of his research: "As in the kitchen, personal hygiene activities are not simply single, water-only functions. Each thing we do is really a cluster of subactivities that require a variety of implements,

storage and work surfaces." It was a point most succinctly expressed in his motto: "Four vases do not make a bathroom".

The Bathroom contained not only descriptions but also diagrams and photographs illustrating its subject matter. Accompanying the design criteria were suggested improvements to conventional sanitaryware designs.

Sponsored in part by sanitaryware manufacturer American Standard, it was the culmination of seven years' research at Cornell University's Center for Housing and Environmental Design (CHED – now defunct). Kira wrote it not as a dry tract but with the general reader in mind: for each separate function there was a complete account of its historical and sociological background,

which made for entertaining reading.

As a ground-breaking study of a fundamental but taboo area of human activity, the comparison with Kinsey is apt. But in some ways Kira's work faced even greater hurdles, as by no stretch of the imagination could the details of human "elimination" become the subject of fashionable dinner-table conversation. Even in the so-called swinging sixties, it caused outrage.

"There were several letters to the University," remembers Kira, "protesting and saying, 'What on earth is the University doing, wasting its valuable time and money and research efforts on a topic like that? My God, it's disgusting!'"

"Then at the same time it hit all the newspapers. It was also ironic because in most cases the papers wouldn't use the word 'toilet' or 'water-closet': they referred to the 'watchamacallit!'"

The general effect of Kira's book was to treat the taboos surrounding the subject as design criteria like any other. But there can be few other areas of human activity where the effect of one group of design factors is to discourage serious study of the other.

"My attitude to that kind of a response is always, 'Look, if you're not willing and able to talk about something, there's no way that you're ever, ever going to solve a potential problem. You have to be able to address it.'"

The hysterical reaction to the book in some quarters was all the more surprising given that in all the photographs the models were dressed in bathing suits and had their faces blanked out.

Not so the second edition. Only ten years later, the social revolution had done its work and it was by now considered acceptable for models not only to be naked but even photographed in the act of urination.

Alexander Kira was born in Estonia in 1928 but has lived in the United States since the age of three. Trained as an architect at Cornell University, he worked for big offices in New York and Chicago before taking up a position at

Cornell. The CHED had just completed a research project on kitchen design that would be immensely influential – this was where the principles of the built-in kitchen and the "work triangle" were first established.

"And then various people were saying, 'The bathroom is the second most expensive room in the house: maybe one should take a look, in the same way.' Well, we said, 'Hmm, yes but...!' And finally we got up our courage and did it."

More significant than the hysterical reaction from the moralists was that of other architects: "I've had lots of correspondence but I could almost say to you, none of it from an architect," says Kira. "Over the years when I have lectured at various sundry places, the smallest [audiences] have been at architecture schools. Most architects couldn't care less. It stems from the fact that most architects until very recently weren't interested in interiors anyway."

"And in most cases, historically, if you were working in a big firm, who got the bathroom job? The newest, youngest employee. It was like latrine duty in the military."

Nevertheless, the struggle against architectural apathy goes on. Twenty years after the second edition Kira is now working on the third. Arguably, the intervening years have seen a reduction of overt public interest in bathroom ergonomics: the affluent eighties brought with them a switch in focus towards the bathroom's so-called "sensuous" qualities. Paradoxically, however, in this case the word often meant "less comfortable" because with this trend came a reversion to earlier designs of sanitaryware that were less well-adapted to the human body.

It is therefore perhaps surprising that Kira seems generally satisfied with progress so far.

"Virtually all of my proposals and ideas have been incorporated," he says. "But no manufacturer has said, 'OK, Kira is right, so this is what we shall produce'. What you find now is that

you have to be a really alert and discriminating shopper. If you look at the major manufacturers you can find some very good ergonomic designs, very clean, very simple...very expensive probably. You can also find three pages on down the line some historic reproductions, all gussied up and painted and decorated and shaped."

For many years Kira was a consultant to American Standard for whom he designed an ergonomic toilet seat. But he is hard put to mention more than a couple of manufacturers who otherwise stand out. "There are some speciality manufacturers who do some good things, like HEWI, who have been producing splendid series of bars and speciality items," says Kira. "Grohe continue to turn out really good taps [that are] well designed."

Whatever the progress in the industry, it is less clear whether attitudes to hygiene amongst men and women remain as different as they were in the late sixties.

"When I was lecturing at a kitchen and bath dealers association, I got a great standing ovation from the ladies, [but] the men walked out – quietly. They were embarrassed. In Europe it was exactly the same reaction: the women thought it was great and the men just quietly walked out."

Perhaps this different reaction had something to do with women's status as an oppressed majority in the design of public lavatories. Invariably forced to queue because of inadequate provision, according to Kira's research few of them even care to make contact with the toilet seat, preferring instead to "hover". As elsewhere, Kira proposed a constructive solution.

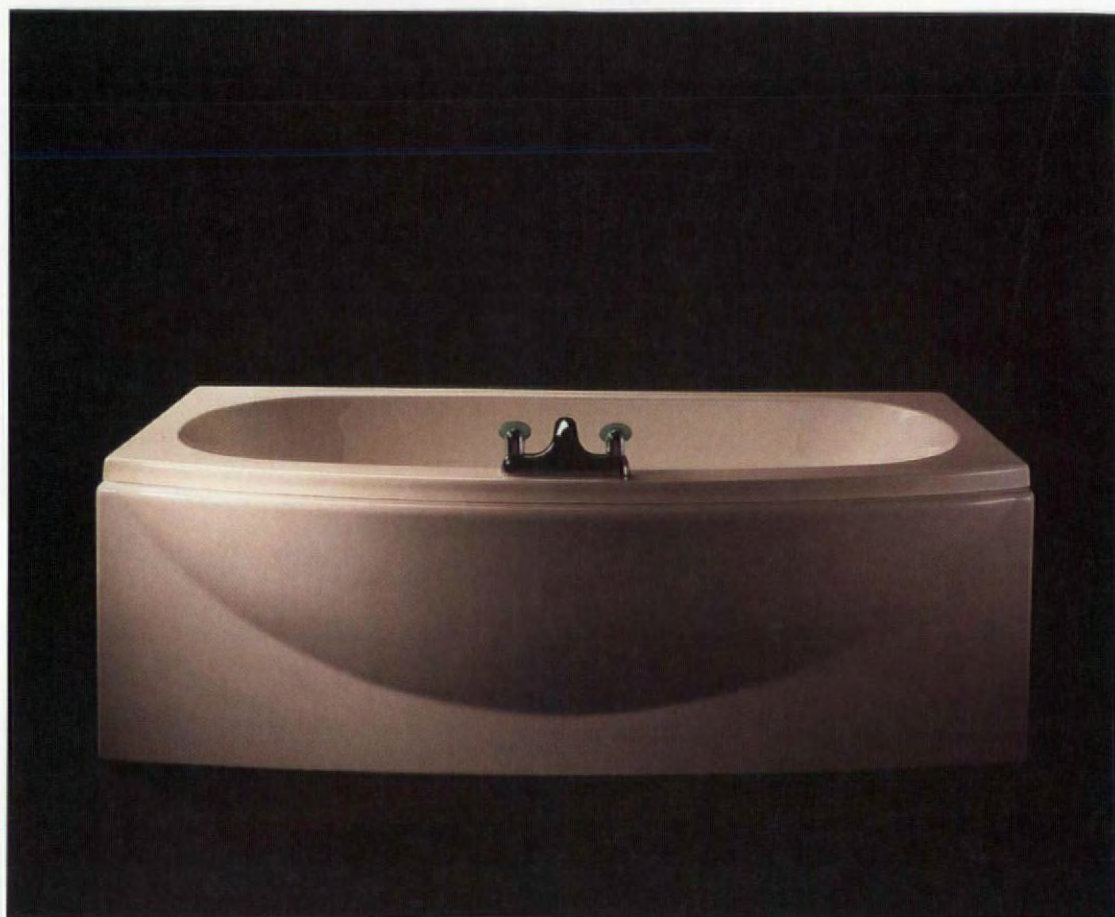
It is this sort of information, no doubt all too familiar to women but a revelation to most men, that makes *The Bathroom* salutary reading for any architect who wishes to do as much justice to a building's bathrooms as to its architecture.

WA

Alexander Kira, *The Bathroom* (Second edition), published by Penguin Books, 1976



Ideal Standard
Design: Robin Levien



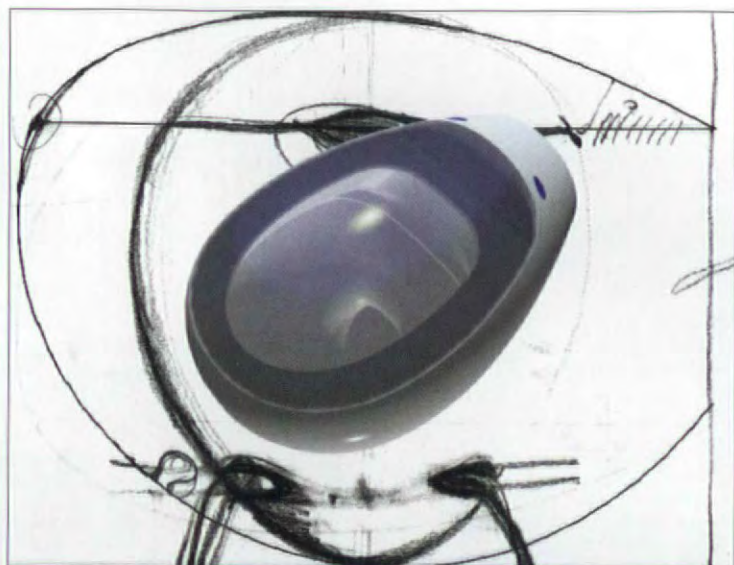
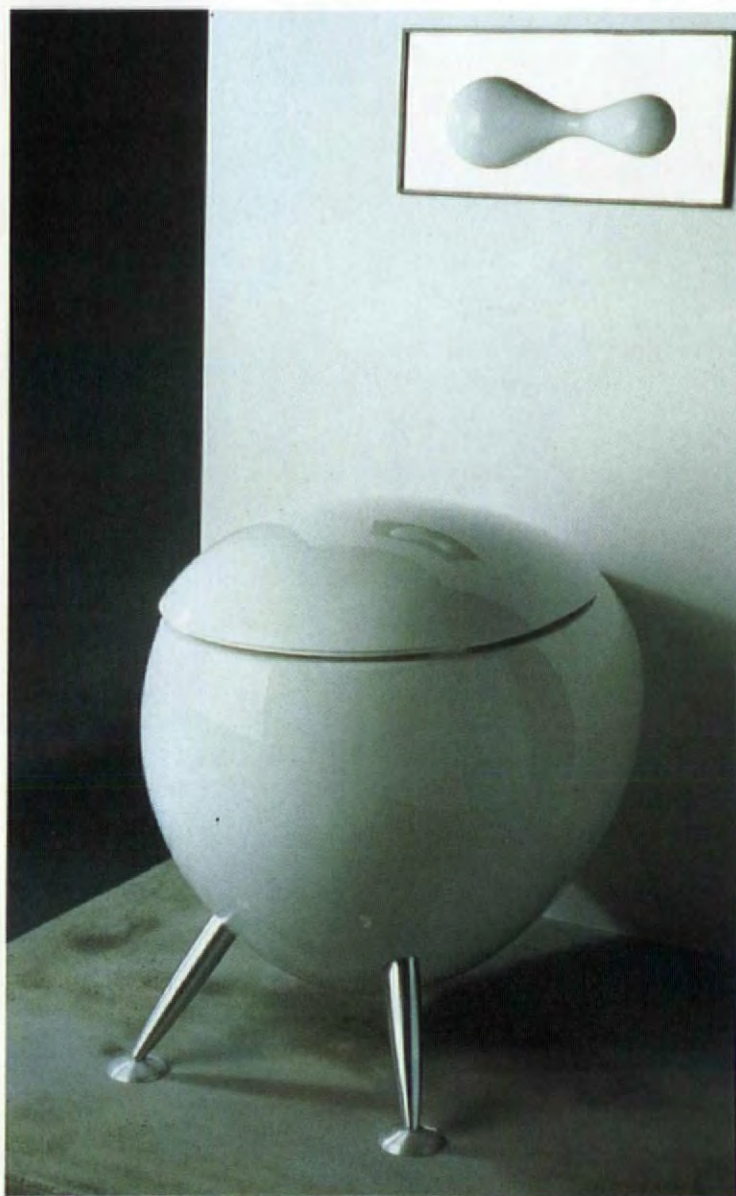
Top Kyomi Arc bath with curvaceous bow front. *Above left* Oval basin supported on column pedestal. *Above* Kyomi toilet with flush lever turned up – for ease of use – and shelf space on top of the cistern. *Opposite page* Kyomi product range in situ



Allia

Design: Ron Arad Associates

Below left Arad's design succeeds in getting away from the conventional shape of the toilet. **Below and centre** The lid and seat complete the unbroken skin of the ovoid. **Bottom** Detail drawings

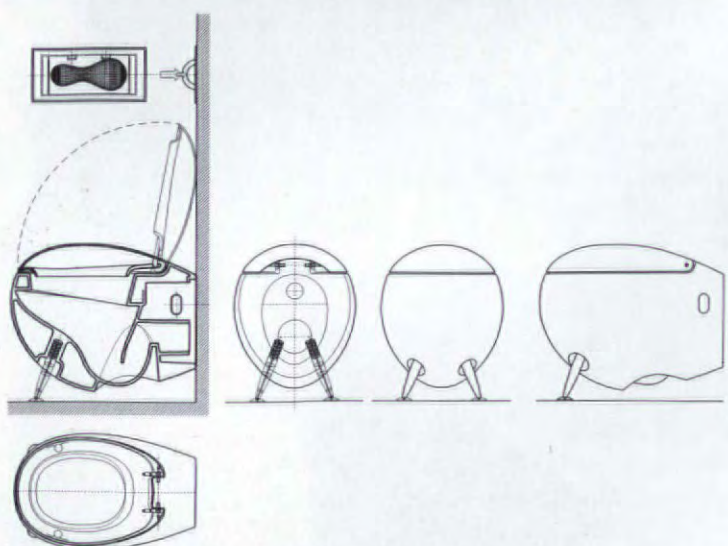


A futuristic new toilet design by Ron Arad Associates is the result of a Ceramic Network event held in Limoges earlier this year. Organised by l'Agence Régionale de Développement du Limousin (ARD) in collaboration with the Centre de Recherche sur les Arts du Feu et de la Terre (CRAFT), the event brought together seven designers and manufacturers to create products for the modern home.

Working with French manufacturer Allia, Arad has succeeded in getting away from the traditional shape of the toilet, instead creating an ovoid with an unbroken, curved surface. The

result is a double skinned toilet with a perfectly smooth outer layer, and an inner skin which follows the shape required for efficient drainage and cleaning. The lid and seat complete the ovoid.

The product is designed to be cantilevered off the wall, although legs are an optional extra where this is not possible. These protrude at angles from the base of the toilet, giving it an almost human-like appearance. The flush handle is an asymmetrical, smooth solid with two distinctly different "buttons", one for a short flush and one for a longer flush. **WA**



Catalano

Design: Nilo Giacchini



Acqua 90 is a new ceramic basin by Italian manufacturer Catalano, recently shown at Bologna's Cersaie exhibition. Forming part of the Sistema Acqua series designed by Nilo Giacchini, Acqua 90 is a wide-rimmed basin measuring 900 millimetres and has been designed for ease of assembly.

There are two principal options. The first is designed to be free-standing and incorporates a body shell and trap-cover which are self-levelling to produce a perfect join. These are fastened with two nuts threaded into the ceramic, while the two lateral semi-circular towel rails are fixed to the sides via a simple screw. The second option includes a wall-mounted chrome-plated brass frame, on which the basin sits. This also doubles as a towel rail. For the traditional washstand look, the frame can also be supported on legs

which are height adjustable to balance out floor level inconsistencies.

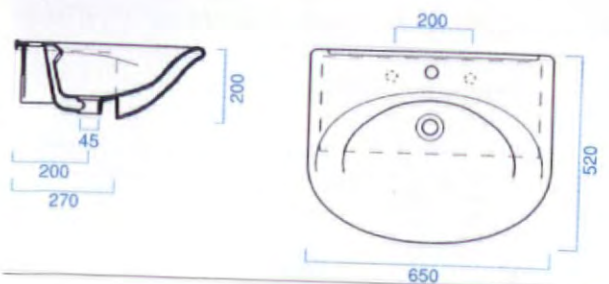
The oval shape has been carried through to the accompanying mirror with integral top lamp and a small chest of drawers on chrome legs. Both the mirror lamps and the drawer unit can be colour-coordinated to match the body shell of the basin, currently offered in morning white, blue mist and lichen green.

Sistema Acqua is a flexible and functional system designed to provide the user with a perfectly integrated space. Other options include a smaller counter basin, a combined basin and shelf unit and one supported on a column pedestal, all available with both single lever taps or a three hole option. The freestanding bidet and toilet complete the system.

WA



Above left and right Catalano's new Acqua 90, a free-standing, wide-rimmed basin, designed for ease of assembly. **Left** Sistema Acqua counter basin. **Below** Diagram illustrating other options within the Sistema Acqua range



Armitage Shanks/ Pressalit

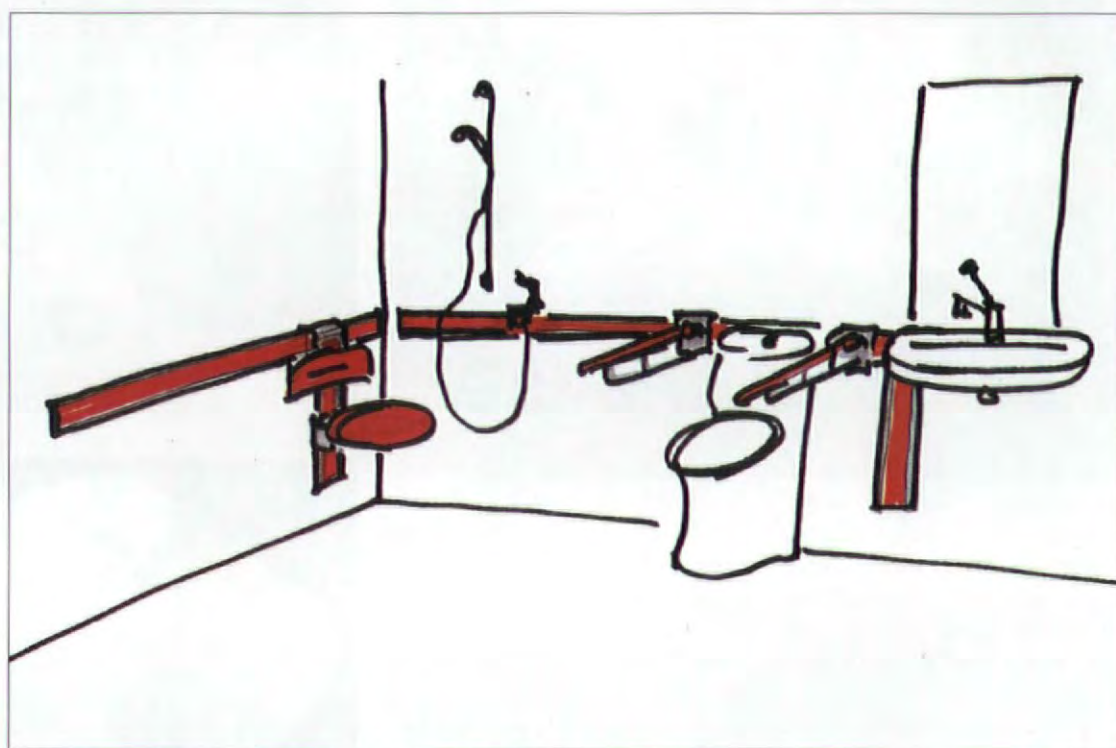
Design: in house



British manufacturer Armitage Shanks and Danish firm Pressalit have formed an alliance to develop a range of top quality bathroom products for the growing care sector. This new collection combines Pressalit's expertise in the manufacture of track systems with Armitage Shanks' experience of sanitaryware and support systems. The result is a range of 17 component parts, which translates into 28 product combinations for hospitals, residential care homes, public washroom applications and those requiring independence at home.

The main element of the system is the Multi track which fixes directly to the wall. This is used to support the various products, such as basins and seats, which can be secured at any point along the track. Once the track is installed, products can be adjusted with ease either horizontally – for example moving a support arm nearer to the basin – or vertically, allowing the basin to be raised to provide access to wheelchair users. This flexibility allows the room to be reconfigured as required, to suit different needs.

There are four key products in the range: the ergonomically shaped support arm, which folds against the wall and locks in position; a shower chair with backrest and optional arm rests; a folding, all-purpose seat, and rise-and-



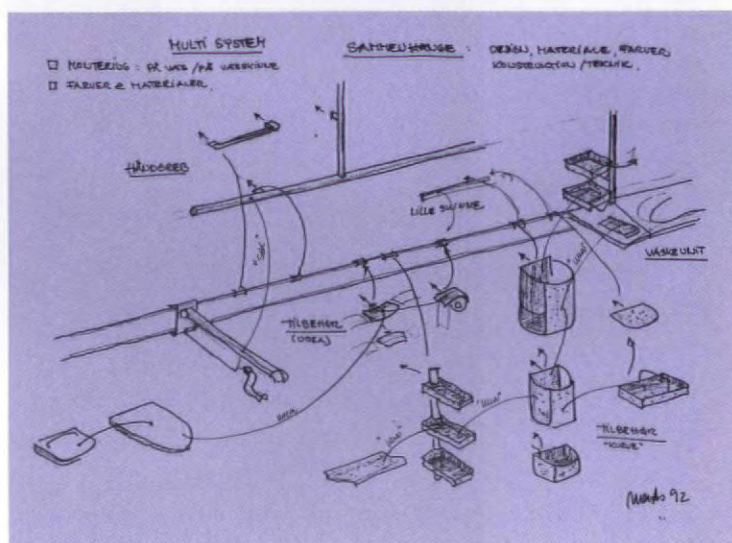
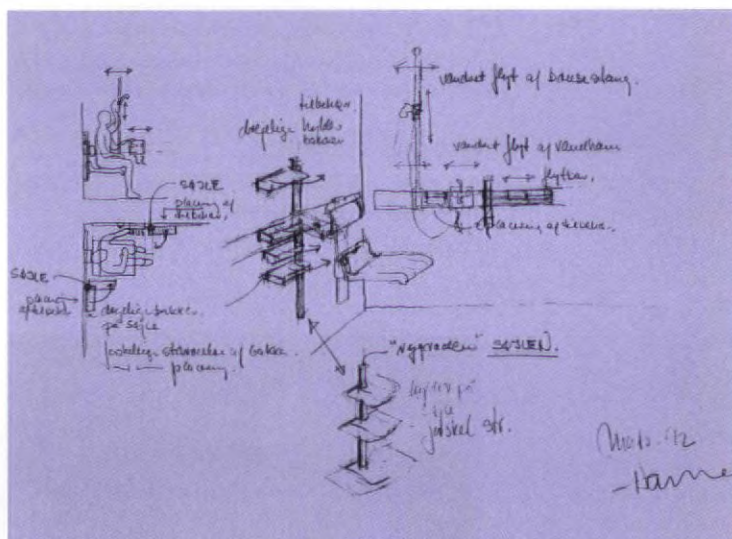
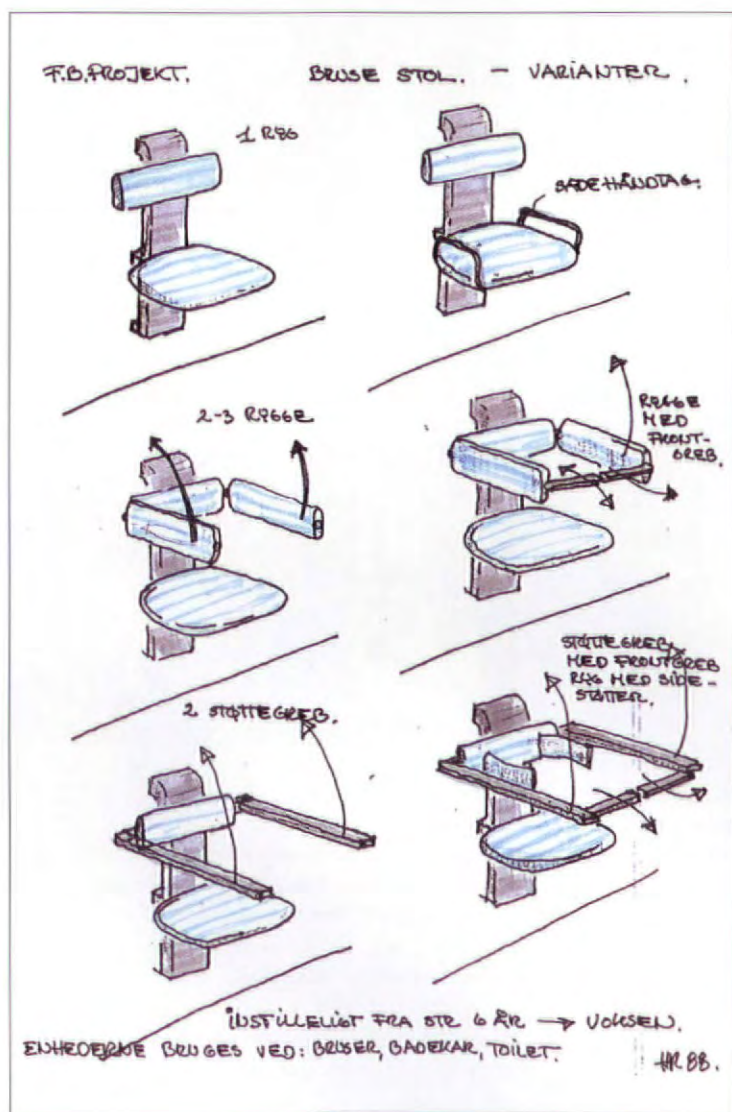
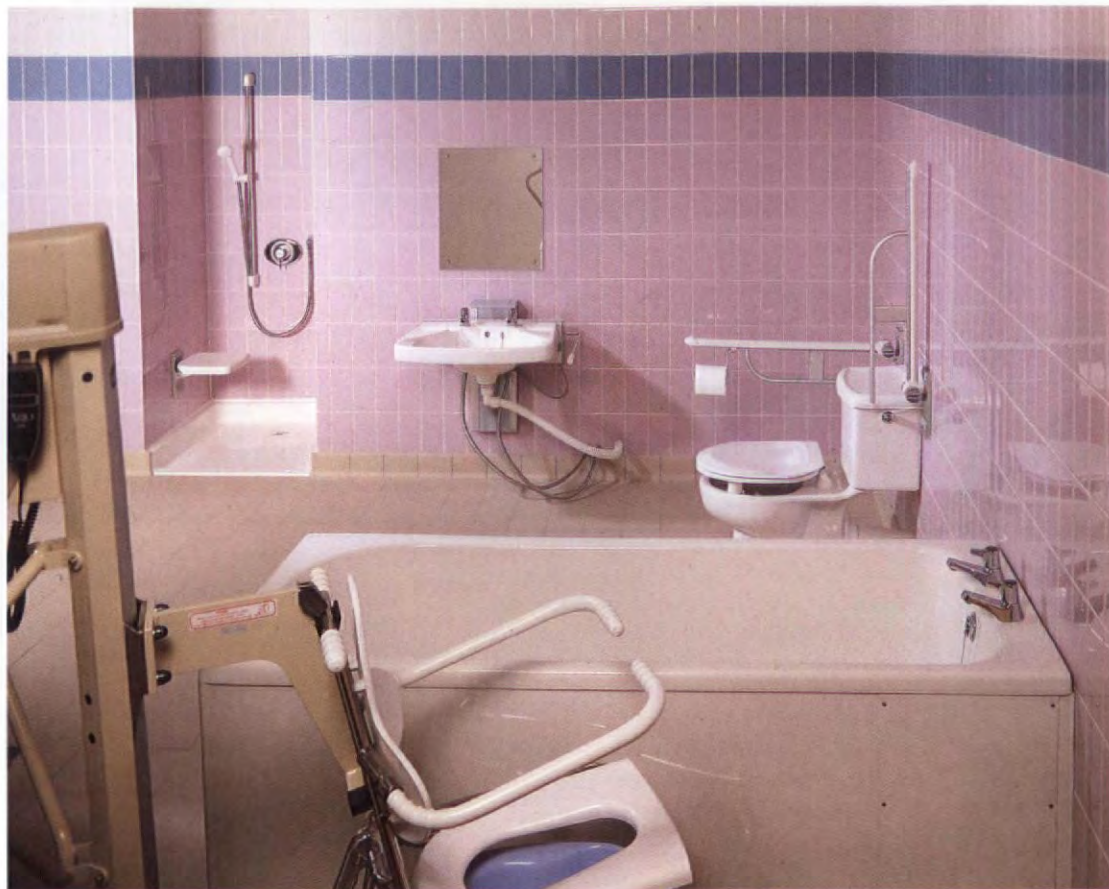
fall basin mountings with gas operation or manual adjustment. There is also a modular shelving system for use alongside a basin or shower, a shower bracket and a flexible feed and waste system. Each product has been designed for maximum user convenience and complements the Armitage Shanks sanitaryware product portfolio in this sector.

What sets this range apart is its visual

appeal. The Multi track and brackets are robust without being obtrusive and consideration has been given to the choice of materials. The main components are made from aluminium which as well as being aesthetically strong, is also hygienic and easy to clean. Attention has also been given to the details such as the shower seat which has small channels to drain the water away. And safety has been given a high priority,

allowing the user to lock the brackets in their desired position on the horizontal Multi track.

The Pressalit Multi System was first seen some years ago – an innovative product in a market sector badly in need of design input. This recent alliance with sanitaryware leader Armitage Shanks will now provide the specifier with a single-stop service both for the sanitaryware and all the support items. **WA**



Portfolio



d line

The sanitaryware accessory programme from **d line** offers a comprehensive range of stainless steel products designed for both domestic and commercial environments. This year, five new products have been introduced including a sanitary waste bin, bottle opener which complements the drinking cup dispenser (above) and a tissue dispenser (left). These two latter items are wall mounted and available in an optional white finish. All products in the dline range incorporate unique concealed fixings, rendering the products both theft and vandal resistant.

The development of the **d line** programme is based on close communication between **d line** and

the designer, architect Professor Knud Holscher, thus ensuring continuance of the design concept throughout the range. The company's latest catalogue contains complete details of the range together with technical specifications.

d line international as
Carl Jacobsens Vej 28, Valby
DK - 1790 Copenhagen V
Denmark

Tel: +45 36 18 04 00
Fax: +45 36 18 04 01

Colombo Design

The Onda range of bathroom accessories designed by Carlo Bartoli for Colombo Design combines simple elements with elegant styling. The accessories are mounted on slim metal supports available in various lengths and sized on the basis of a 12.5 cm module. Metal finishes are soda grey and matt black.

Colombo Design SpA
Via Baccanello, 22 - 24030 Terno d'Isola (BG), Italy
Tel: +39 (0)35 905400
Fax: +39 (0)35 905444



Inda

New fittings and new colours have been introduced to the Globe series, Inda's successful range of brass fittings. These include a walnut frame rectangular mirror with optional white Murano glass lamp (shown), and a wider range of towel fittings and shelving.

INDA Industria Nazionale Degli Accessori SpA
Via XXV Aprile, 53
1 - 21032 Caravate (Varese), Italy
Tel: +39 (0)332 608111
Fax: +39 (0)332 619317



The Sentosa two handle mixer incorporates the newly developed Carbodur cartridge, ensuring both durability and a smooth handle action.



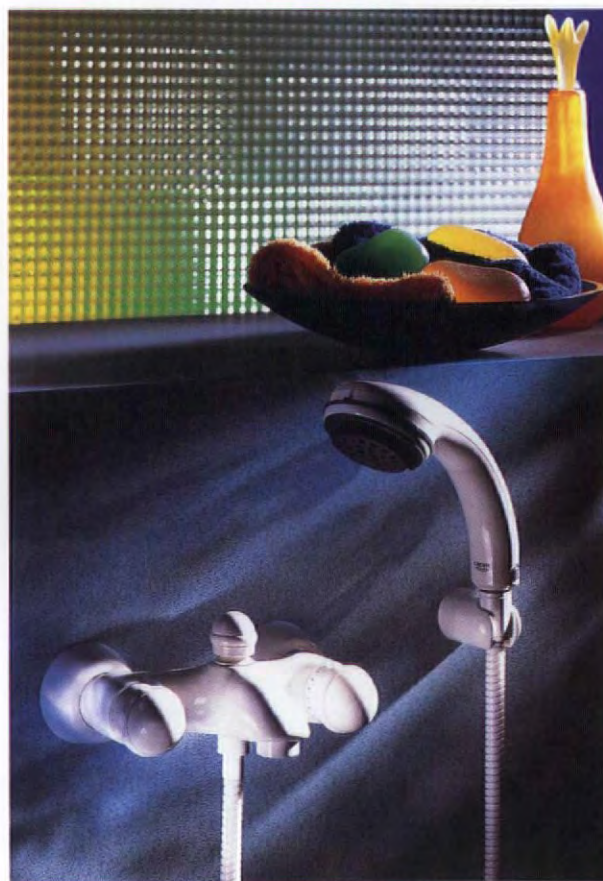
Detail of the unique Sentosa handle design which supports the interplay between finishes and colours – matt, chrome and gold.



The Sentosa fitting from Grohe combines contemporary styling with robust construction. Available in various colour combinations – chrome, chrome/gold, white or white/gold.

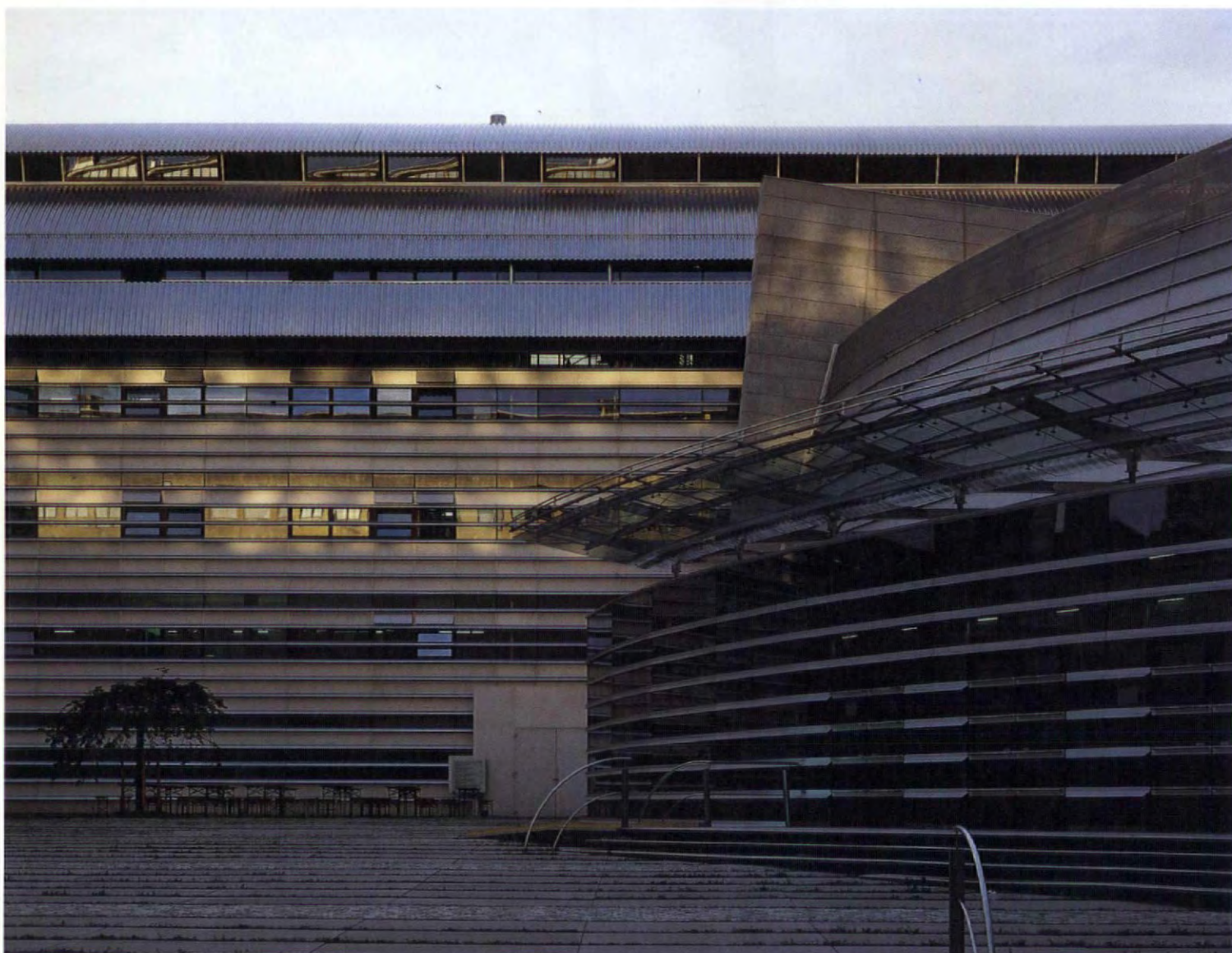


The Sentosa thermostat is both elegant and economical, with a built-in economy button providing water savings of up to 50 percent.



The curved bath mixer designed to compliment the Relaxa plus Champagne hand shower.

Friedrich Grohe
Aktiengesellschaft
Postfach 1361
58653 Hemer
Germany
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