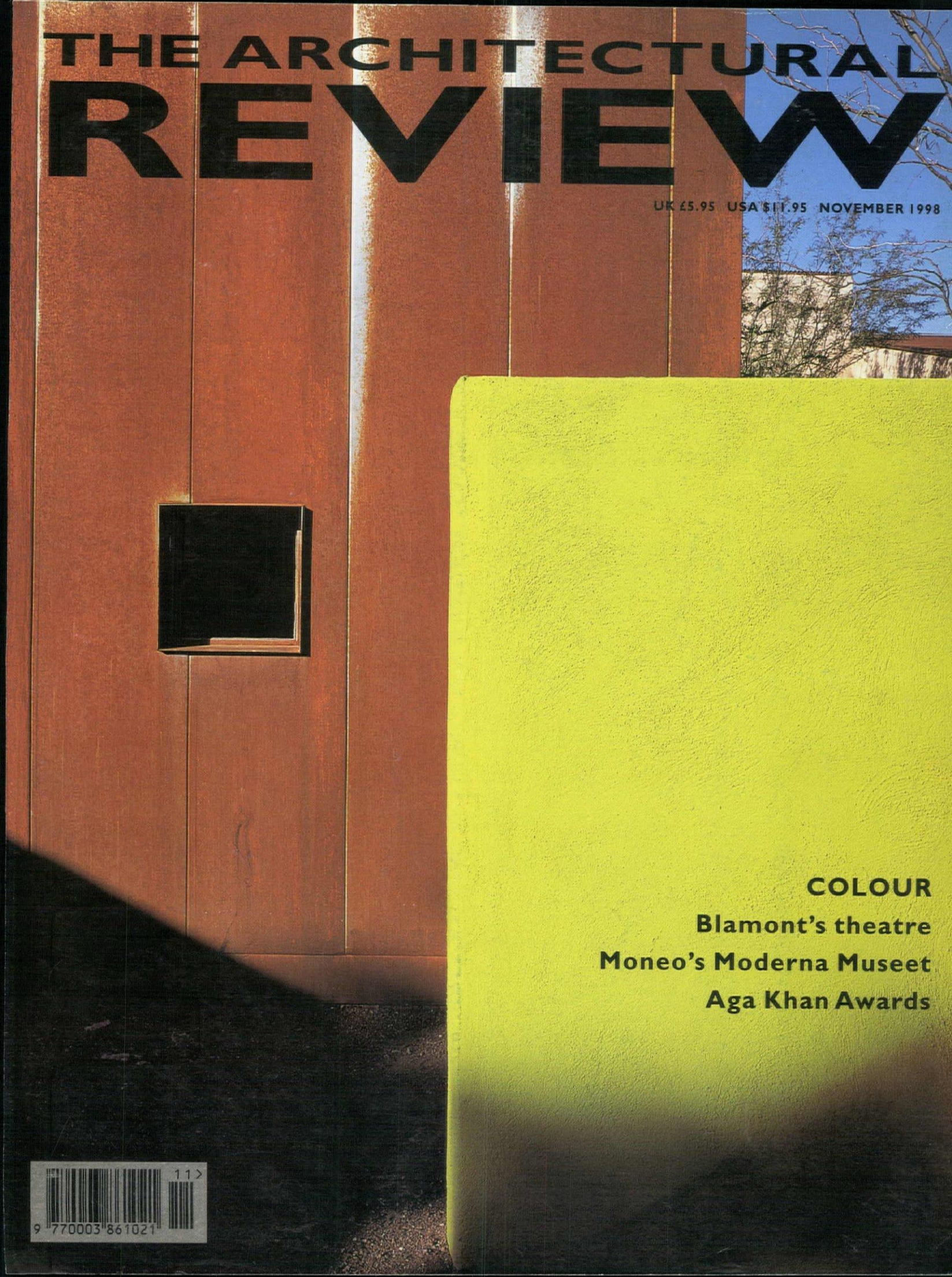
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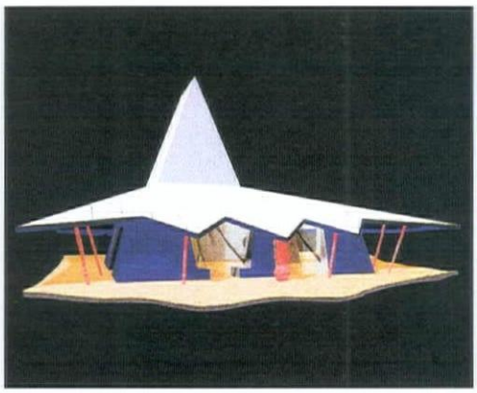
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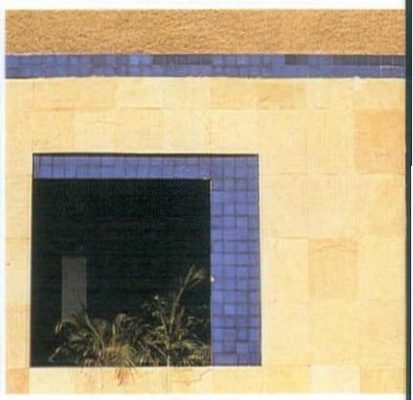
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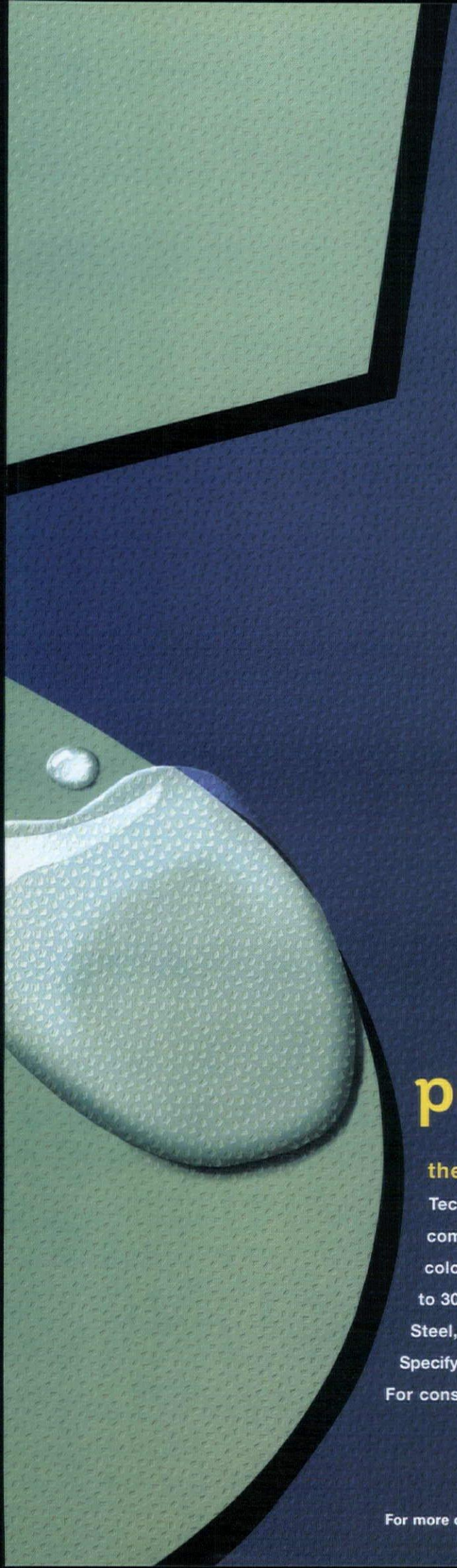
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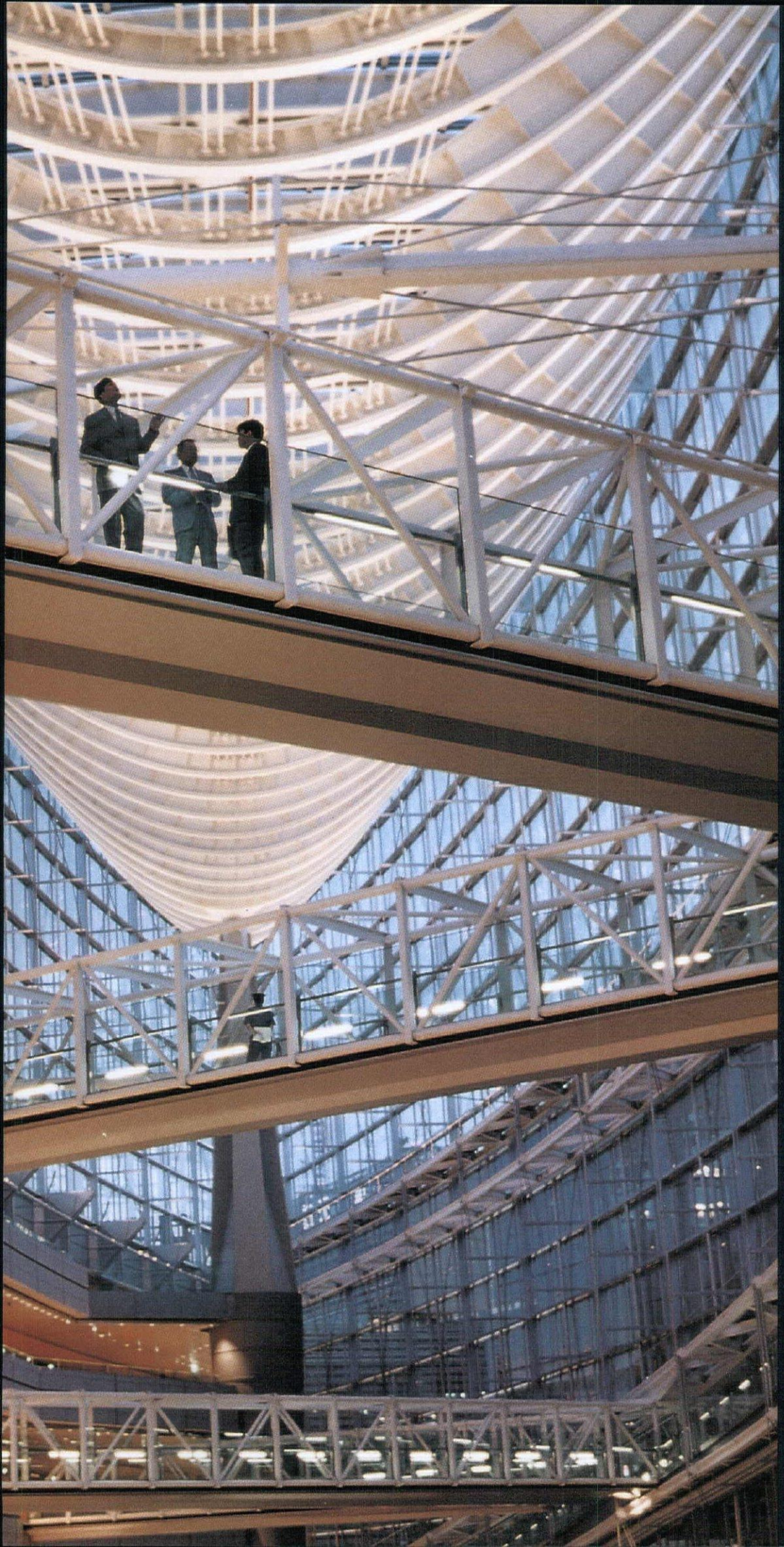
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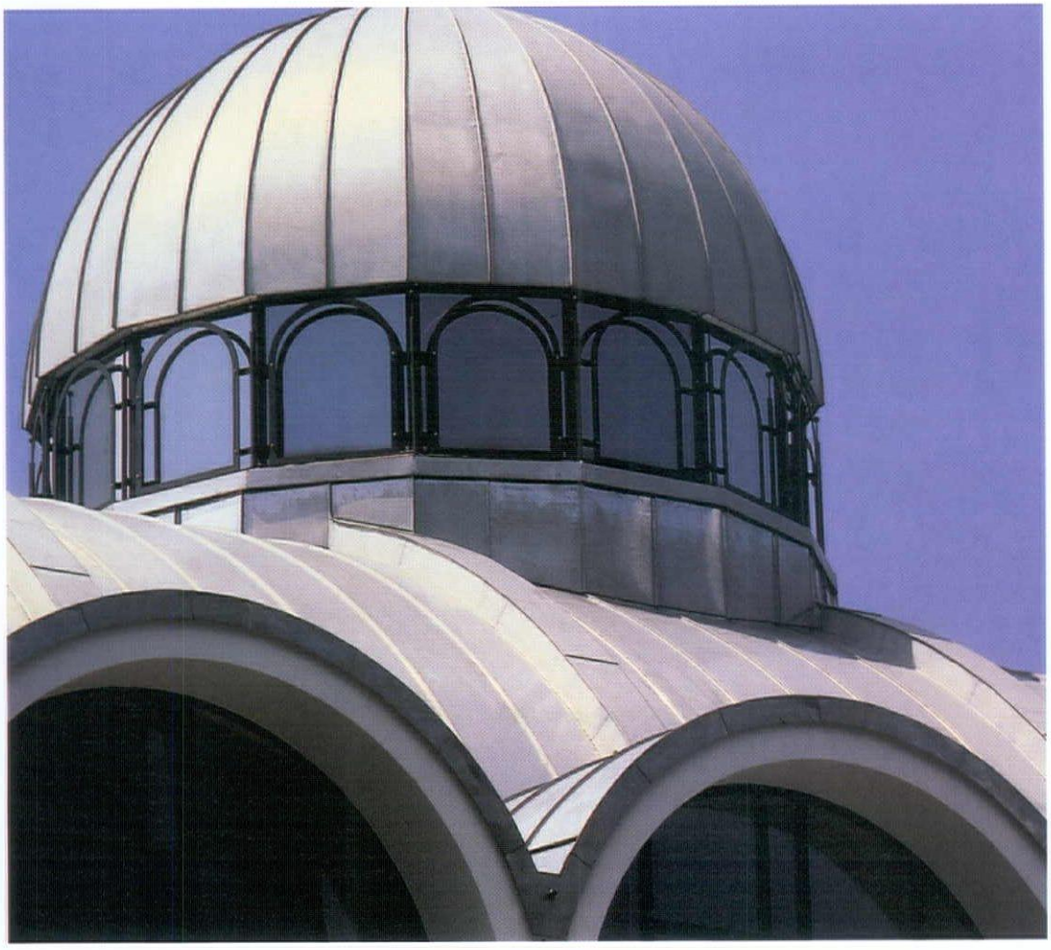
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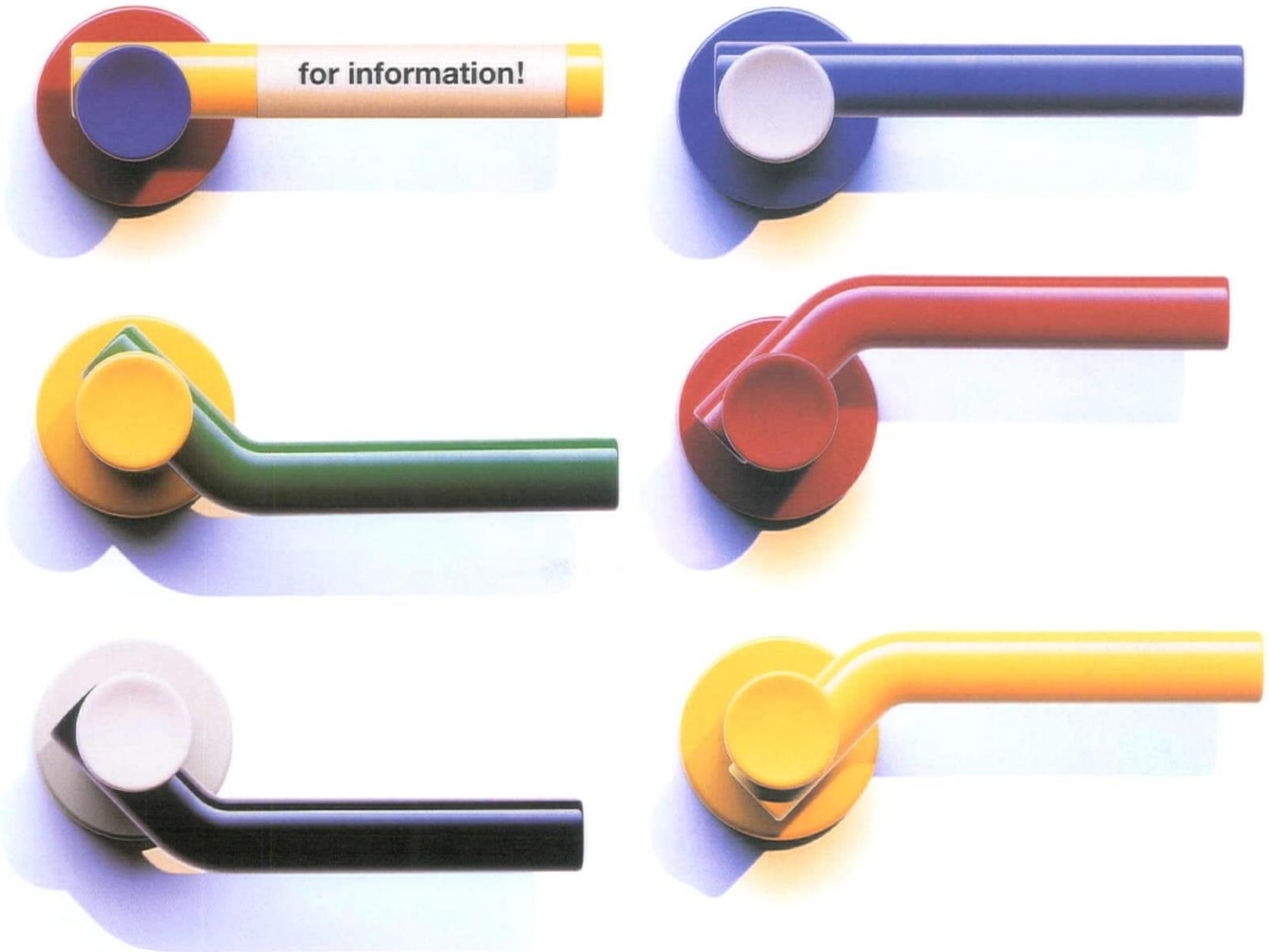
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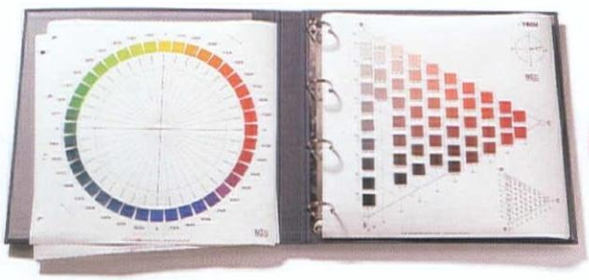
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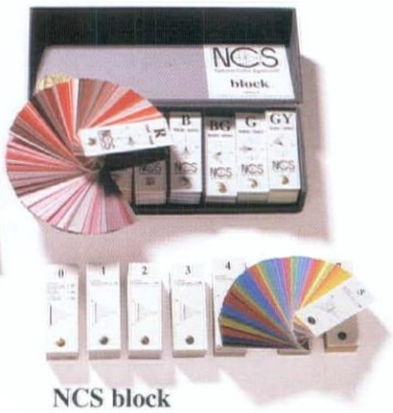
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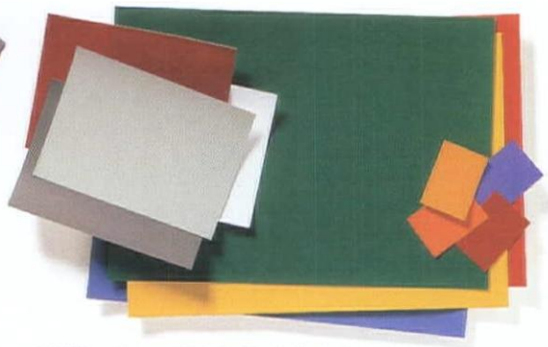
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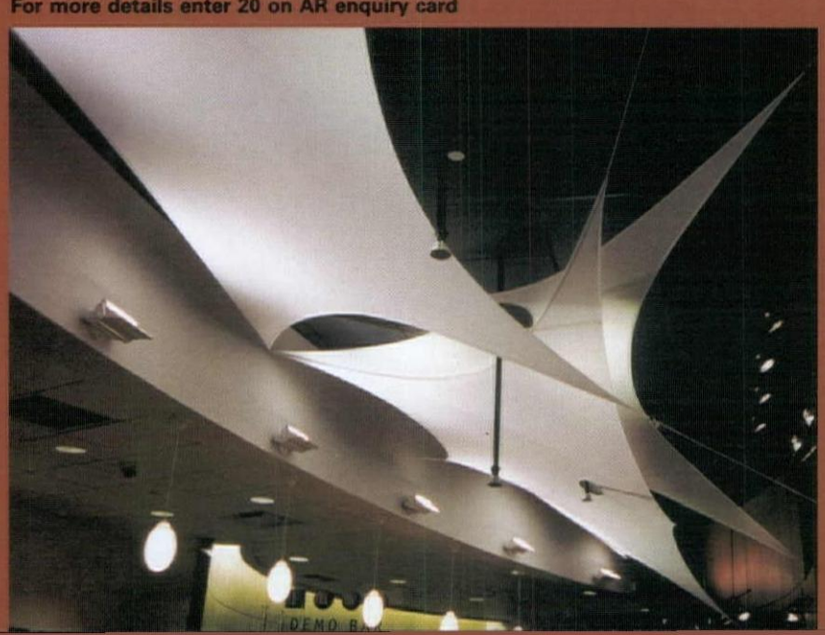
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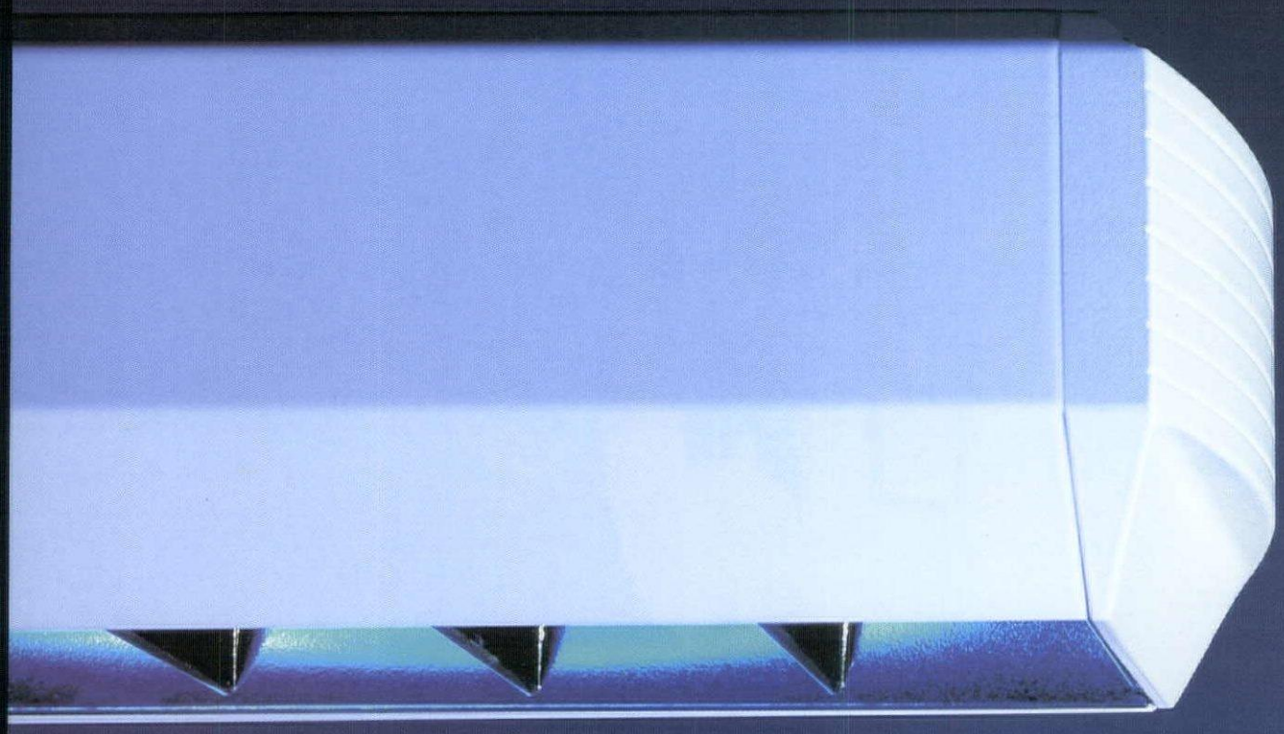
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VIEW



Icon of the Swiss century – Robert Maillart's poetic fusion of material and form, the Salginatobel bridge, 1929.

Swiss significance

For a small landlocked country Switzerland has packed in a great deal of architecture. Density and quality is reflected in the Deutsches Architektur Museum's fifth exhibition focusing on twentieth-century Europe.

The DAM's survey of 140 projects starts with chronological tables of urban development, world architecture 1850-1969, and a synopsis of Swiss architecture 1950-1980. The visitor is mesmerized by the exacting nature of the Swiss character, the need to order and quantify. Divided by three languages and difficult terrain, Switzerland has forged a national identity which both binds and allows for federal freedom. In a culture of watches, chocolate and myth makers, the extreme topography of the Alps has come to symbolize Switzerland. Traversing, researching and taming the mountains is a national cultural activity.

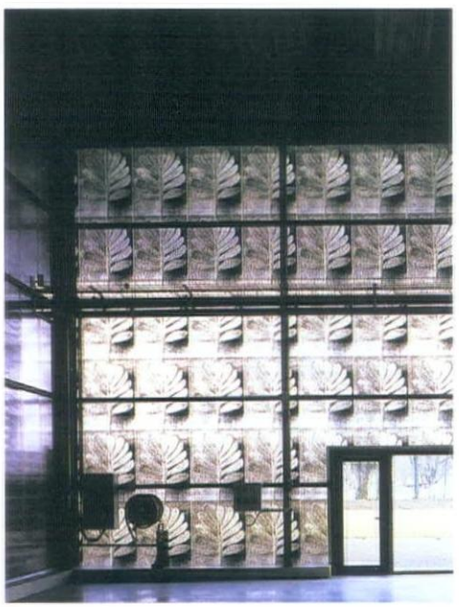
In 1863 the first *Schirmhäuser* (umbrella huts) of the Swiss Alpine Club were no more than dry walls protecting a rocky outcrop. By 1927 there were 106 as the original purpose of the Club (to research Alpine topography) shifted to an interest in experiencing the Alps recreationally, through mountaineering and skiing. Convalescent homes for tuberculosis patients, such as Sanatorium Schatzalp in Davos (1900) by Pfleghard & Haefeli, equipped with conversation salons, lecture rooms and restaurants, were nothing other than luxury hotels with laboratories, precursors of mass alpine tourism, as described so presciently by Thomas Mann in *The Magic Mountain*.

Switzerland's transport infrastructure was, from the beginning, innovative and Modernist. Robert Maillart's Salginatobel bridge in Schiers (1929) is an icon of the century. The temporary works alone were a breathtaking feat of the industrial age. Heinz Isler's 1968 concrete shells at Deitingen motorway service station, built as prototypes for a string of service stations which never materialized, influenced a generation of students. Isler went on to complete over 1000 other shell structures. In railway architecture, Santiago Calatrava's 1991 Stadelhofen Zürich station (AR January 1991) composed of sculptured concrete caves, is the latest in a line of development that began with Hans Hilfiker's 1954 Winterthur station platform roofs. These took the form of cantilevered concrete wings with edge strip lighting and also incorporated the lucid, precise typography for which Switzerland has achieved a reputation. The Swiss special relationship with mass fair-faced concrete is again evident in Herzog & de Meuron's 1996 Basle Locomotive Depot, a bunker with industrial rooftop glazing.

While the picturesque agrarian image is the one most promoted by the Swiss government and tourist agencies, in reality Switzerland's valleys are full of factories circumscribed by motorways at the hub of Europe's continental road transport system. Corum and Cartier watch factories and distribution centres use their glass facades as autobahn advertisement billboards with etched graphics large enough for high-speed reading. Jean Tschumi's 1960 Nestlé AG administration building of open planning, metal framed furniture, and an early form of dry wall partitioning, exemplifies the nation's obsession for correctness and cleanliness in the face of rising air pollution. Fritz Haller built his 1987 USM furniture factory using the MAXI steel building block system, with possibilities for extension as rational and ordered as the products it houses. Not only is industry polluting the scenery. Debate still rages over the occupation of a whole valley for the open-air swimming pools of Freibad Bellinzona in 1970.

Despite its reputation for bank secrets and financial independence, community and social responsibilities are not neglected. A whole floor of the exhibition is devoted to schools. Housing *Siedlungs* needed engineering solutions which gave rise to such terraced mountainside development as Halen (1955-61) by Atelier 5. Under the title 'Cults and Culture', another floor is devoted to religious architecture from Rudolf Steiner's anthropomorphic Goetheanum to Walter M. Förderer's mountain village church of St Nicholas in Hérémence (1971). A topography of isolated valleys is perhaps the ideal setting for sects and closed orders.

Positioned at the crossroads of Europe, Switzerland has simultaneously absorbed and



Ricola Factory at Mulhouse, by Herzog & de Meuron.

reinterpreted twentieth-century Modernism, producing both the Tessin school and the present architectural movement of simplicity with its emphasis on the *wesentlich* (significant), resulting in a stripped down architecture of extremely plain boxes. Yet in a society in which ostentatious displays of affluence are politically taboo, austerity has come to signify richness.

LAYLA DAWSON

Switzerland: 20th Century Architecture, fifth in the series, after Austria, Ireland, Portugal and Sweden, at the Deutsches Architektur Museum, Frankfurt am Main, until 29 November.
An accompanying 340 page illustrated catalogue edited by Anna Meseure, Martin Tschanz and Wilfried Wang, is published by Prestel in both German and English.

VIEW

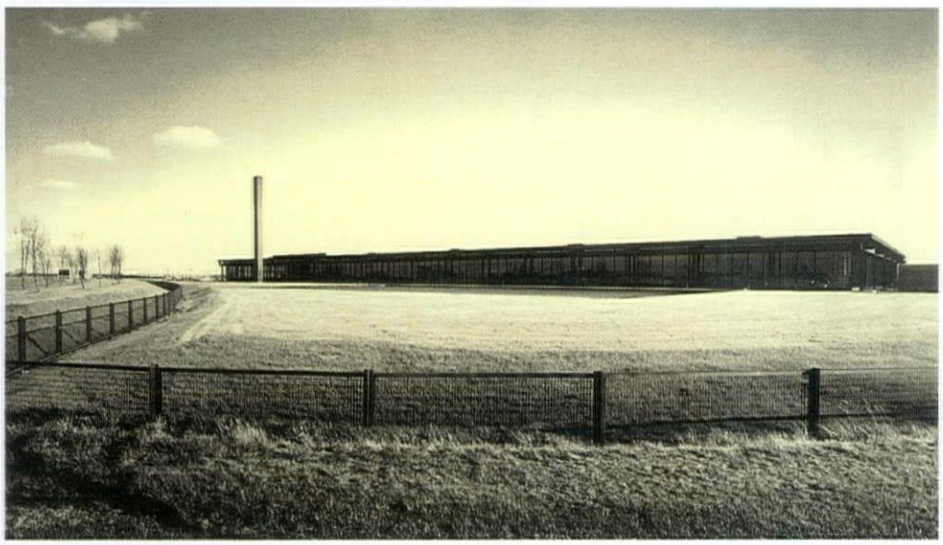
Cummins in peril

The Cummins Engine Factory at Darlington (designed by Kevin Roche and John Dinkeloo), opened in 1966; now it is faced with destruction.

In its heyday (as pictured above), it provided a large open space of almost 15 500 sq m planned to be freely divisible and capable of accommodating a wide range of activities. The long span structure was the first use of Cor-Ten weathering steel in Britain as was the extensive use of structural neoprene gaskets to frame the full-height glazing. These material inventions, combined with radical ideas about the design of the workplace, transformed an everyday industrial building into an elegant steel and glass pavilion.

The building introduced a view of Miesian space and an enthusiasm for detail, assembly and experiment which was inspiring. It was a radical alternative to industry's dreary sheds and still recalls a moment of progress in a particularly American dream that connected architecture and work. It was also a building for an exceptional client. The Cummins Engine Company, under the direction of Irwin Miller, was an outstanding patron of architecture in the workplace and in the town of Columbus in Indiana. As well as an important collaboration between two significant architects which developed out of their work with Eero Saarinen, this building in England was also a part of that vision.

Today the Cummins Engine factory in Darlington is virtually empty, down at heel and up for sale. Hemmed in along Yarm Road by PoMo offices and turreted superstores (the only decent company is provided by Nicholas Grimshaw's new shed for the mobile phone firm Orange), the building has fallen on hard times. It is significant and should not be demolished or converted ineptly. Rather the open spaces, clear spans and the inspiration contained within its glassy skin and rusting frame should prompt the return of a piece of outstanding architecture to work. A. B.



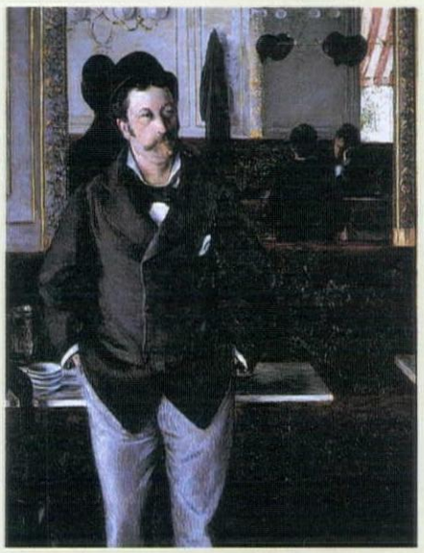
Cummins under threat.

Humble versus hegemonic

'Skill, knowledge and vision were once a hallmark of Islamic civilization, central to the identity of its peoples. The overarching goal of the Award is to stimulate the reawakening of that inheritance, and nurture its continuing evolution in contemporary terms'. The Aga Khan looked back on the 20 years of his awards (p61) at last month's prize-giving ceremony at the Alhambra in Granada.

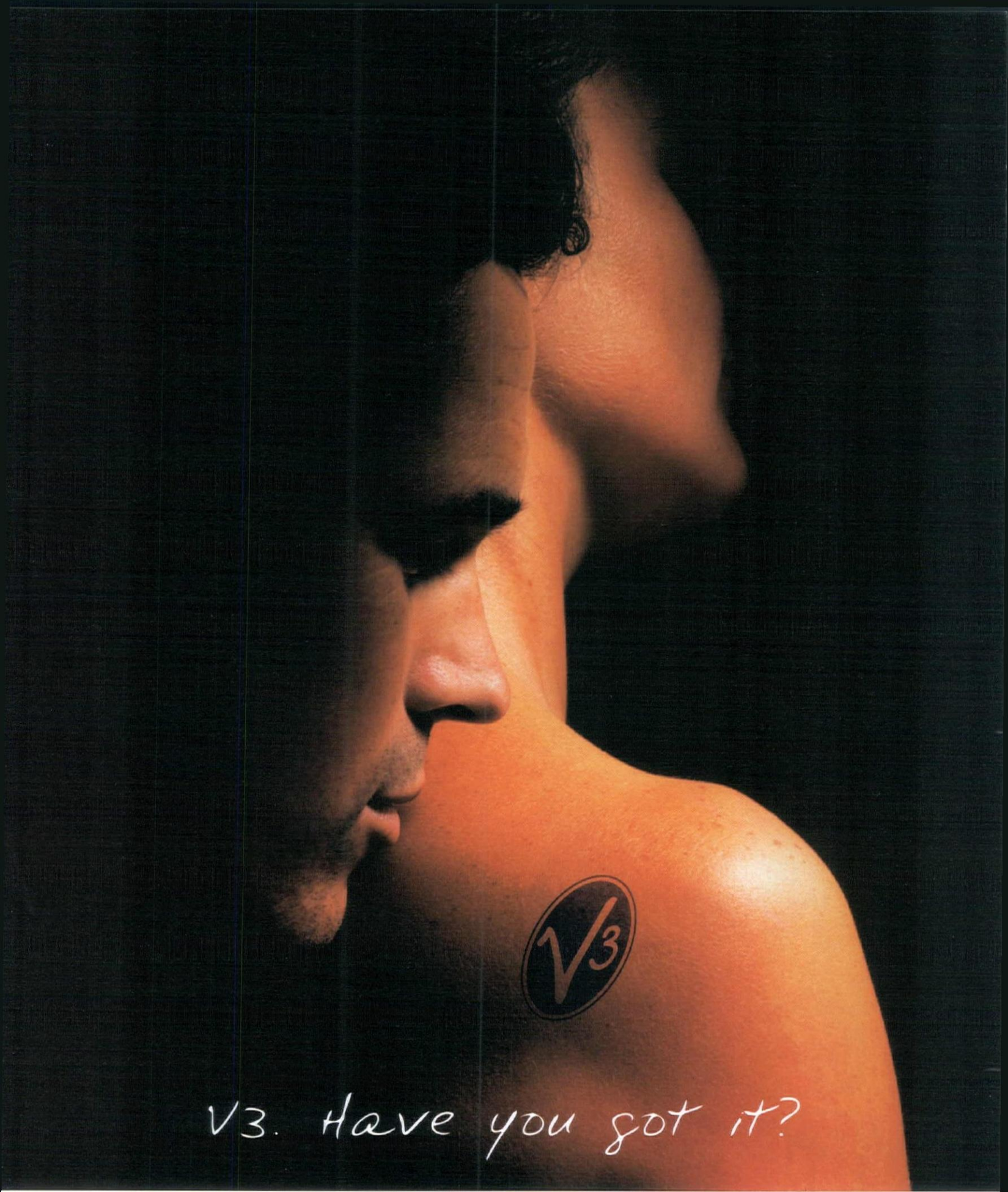
He stressed the very varied nature of the Islamic world, and 'The loss of our inheritance of cultural pluralism – the identity it conveys to members of diverse societies, and the originality it represents and stimulates in all of them – will impoverish our societies now and into the future'.

Cultural pluralism has always been emphasized by the Award, which stretches geographically from North Africa to Indonesia, and economically from the poorest people on earth to prosperous house owners in countries like Malaysia and Turkey. Mohammed Arkoun, emeritus professor of Islamic Thought at the Sorbonne, summed up, emphasizing that there can be no such thing as Islamic architecture,





It is extremely hard for us to understand the ways in which the production of mirror glass has affected our perceptions of interior space. Jonathan Miller's exhibition *On Reflection* at the National Gallery in London (until 13 December), reveals some of the truly magical properties of the looking glass and its effects on space and people. He starts with Van Eyck's famous mirror in the back of the Arnolfini Portrait, but it was not until the late eighteenth century that the transformative powers of mirrors on a large scale began to emerge. As he points out, mirrors suggest the presence of an alternative persona to the real one, a phenomenon much explored by nineteenth-century painters like Whistler (above). And they imply an alternative space in which we move without ever being able to enter (as Caillebotte shows (top). The show is full of invention and perception – and of course reflection – and all architects will enjoy it.



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VIEW

but 'architecture in Islamic contexts'. He believed that 'the twenty first century will not necessarily result in cultural clash' between Western and Islamic civilizations as some have predicted. Instead, it could be a century of cultural intercreativity' in which the hegemonic culture is used and yet confronted by 'humble cultures which have been subdued until now'. The Aga's programme is practically the only means of architectural discussion that exists between them. P.D.

Mexican wave

The first Mies van der Rohe Award for Latin American Architecture has been made to TEN Arquitectos for its Televisa Building in Mexico City.

The winning project was chosen from 23 finalists whittled down from 77 pre-selected entries drawn from all over Latin America. The jury included architects Fernando Távora and Ignasi de Solà-Morales and Terence Riley, curator of architecture at the Museum of Modern Art in New York.

Organized by the Mies van der Rohe Foundation in Barcelona, and run along the same lines as the Foundation's biennial Award for European Architecture (AR October 1995), the award aims to acknowledge exceptional examples of contemporary architecture in Latin America. TEN Arquitectos' building for Mexico's main television network Televisa is a sleek, elliptical shell, set on a cramped trapezoidal site in the heart of Mexico City. Clad in silvery aluminium panels, the truncated cone of the building is a striking landmark in its jumbled urban surroundings. C. S.



TEN Arquitectos in Mexico.

Erratum

The price of *The Garden in Ancient Egypt* (book reviews, AR October, p89) was mistakenly given as £45. The correct price is £25.

letters

Banana split

SIR: In AR August 1998 there was an article on the Modern Art Museum in Helsinki, designed by Steven Holl. The writer praised the building highly and took it that Holl had in his building given a material illustration to the Finnish soul. Nothing could be further from the truth!

The architecture is interesting in places but certainly not asking for contemplation and meditation and feeling/thinking deeply of the art. It seems to ask to be kicked at, and this can be seen on the walls and under the handrails. The outer appearance of the building is a mess of different metals like an old and many times repaired industrial building. Something good in the northern facade, I admit.

The Finnish soul is very finely illustrated in many of Alvar Aalto's buildings. Holl's design has given us a block and banana which close the view from the city centre towards the north. To see this view again we need to pay £3 worth of money to climb up and look through a window. This of course gives us the positive opportunity not to see the building.

Alvar Aalto said that a building needs to be designed so that it welcomes you. The doorhandles, the doors, handrails and so on must feel good in your hand. Holl is said to be a good designer of details, but this is impossible to believe as his handles and handrails are rough, the surfaces collect all possible bacteria, doors are heavy and the joining of handrails, handles, walls and doors is so clumsy, partly sharp edged that you simply don't want to touch. The lavatories give the impression of being used on the deepest level of a mine for 15 years and never being cleaned – even if the cleaning personnel seem to do their job quite often and well. The washbasins are said to be designed by Holl himself. Did he really look at them? The acoustic world of the building is like that of a railway station. Each clinking of forks or plates, each splash of water from the tap or each moving of a chair adds to the cacophony of noise within. The chairs in the café don't give you a comfortable and rest-giving posture. Bizarrely, from the café you see only the feet of the equestrian statue of Field Marshal Mannerheim.

The banana pushes itself between the Main Post Building and the statue of the Field Marshal giving neither of them space to breathe. (The location of the building of course is not Holl's fault).

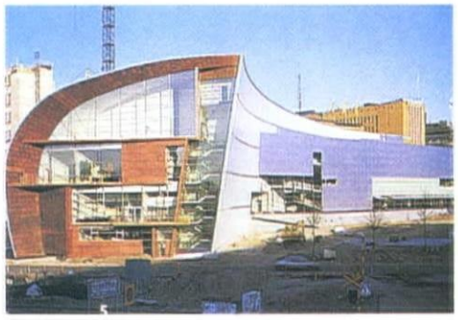
The Finnish soul is not untidy, clumsy, unfriendly and negligent of one's environment.

Mr Grosschen from Germany was right (AR September p26) in that Holl's banana worsens the situation in this central area of Helsinki. Unfortunately we cannot escape but now need to live with it.

Yours etc

KAIJA SANTAHOLMA

Helsinki, Finland



Holl: unFinnish?

Revelling in sensuousness

SIR: Recently I read a suggestion that the reason American culture has dominated the twentieth century is its shameless embrace of sentiment and emotion. This is certainly true for two of the major arts of the twentieth century, popular music and the movies, even if the emotions being aroused are sometimes cheap and easy. By contrast, it is suggested, in Britain we cannot address emotion, leaving us capable only of ironic commentary, which constrains our ability to produce genuine art, or, in architecture/engineering at least, of producing the severely rational, and this can tiptoe on the edge of soullessness.

Therefore, the use of the word 'love' in your editorial review of Martin Pawley's *Terminal Architecture* (AR July 1998) was clever and appropriate. Its oddness in the context of architectural criticism emphasizes the problem with the ultra-rational design approach, of which Pawley's futureworld is one logical conclusion. It seems so sadly English, but in its as yet less extreme architectural form this approach has proved both particularly attractive and a considerable source of quite deserved success for the English, perhaps because the more rational the more testable the quality, and opinion is not involved, but it also demonstrates that 'something about England' often called good old-fashioned Puritanism. The view that logic, reason and seriousness must exclude emotion. In the new

VIEW

biography it is interesting to note that James Stirling wrote early of the difficulty of being an architect and an Englishman at the same time, and of the desire to unite art and technology.

The contrast between 'excluding' and 'embracing' architecture is the classic difference between that which says architecture is only what is left when 'decoration' is removed, and that which says that architecture only begins beyond the 'type' or the frame. The futureworld envisaged lies at the end of the former. But this doesn't seem to be the way things are going, the buildings now creating the biggest stir, notably Gehry's Bilbao (of course), clearly lie wholly in the embracing wing, if not entirely dismissing the division.

An intriguing notion arises from this. America has not dominated architecture in the twentieth century as it has the other arts, and could this be because, when the faults with the more sterile corners of European Modernism were identified, America indulged in the uncharacteristically ironic and non-genuine commentary of Post-Modern Classicism instead of aiming more seriously and squarely (and temperamentally appropriately) at emotional abundance? Are they now starting to get it right, and/but are these the quick thrills of the summer blockbuster or is it genuine sensuousness made solid?

The old idea that mind/science/reason and heart/art/emotion are different places has been displaced in some of the most serious of sciences, if not in art. One of the keys to a solution for architecture does lie in seriousness; be rational, never indulge in blatantly fashionable or ironic commentary, as architecture is too long lasting, yet learn to revel in the sensuousness of the world. The enduring quality of Scandinavian architecture seems to reflect this lesson, it clearly is of man AND the earth, and hence often compelling. This is the lesson; like the unreasonableness of love, you can convince yourself without emotion that some art you should find good is good, but great art compels.

Yours etc

MICHAEL GREVILLE

London EC2

A credit to France

SIR: We were pleased to see Roissy Airport in the September issue of the Architectural Review. However, the credits for the design of the concrete roof should read: P. Muller/ADP, RFR was responsible only for the design of the steel and glass '*péninsules*' and for the landside glazing of the new terminal building.

In the same issue, we noticed that RFR was not credited for the design of the steel superstructure of the new RER station in St Denis. This project is an example of the on-going collaboration between Jean-Marie Duthilleul's team and RFR's structural designers.

Yours etc

JEAN-FRANÇOIS BLASSEL

RFR, Paris, France

Fair play for Foster

SIR: I am sorry Frank Bright (AR July 1998 p17) was so disappointed with the American Air Museum. His view is not shared by the vast majority of the 450 000 people who have visited Duxford since the American Air Museum opened and whose response has been extremely positive.

He first raises the question of light levels. The American Air Museum has in fact a very high level of natural light compared with many museum buildings. The design aimed to achieve as much natural light as was compatible with the adverse effect of light on aviation paint finishes.

Equally important, however, was the immensely strong roof shell, which has enabled us to suspend many aircraft, dramatically improving their presentation, and making economical use of the volume of the building. Additionally, the great glass front wall produces a very important link between the static and historical aircraft display inside the American Air Museum and the active airfield outside where P-47 Thunderbolts, P-51 Mustangs and a B-17 Fortress can still regularly be seen flying.

Mr Bright also questions the content of the building, which must be seen in context. The overall role of Duxford in general, and the American Air Museum in particular, is quite different to that achieved at Martlesham Heath. Duxford is part of the Imperial War Museum, whose purpose is to tell the story of the history of conflict in the twentieth century. The theme of the American Air Museum is the role of American air power in that history – a critical one, both during the Second World War and in the post-war years.

The story is told from the aircraft themselves, but they are supported by extremely high quality graphics and photographs, five major video presentations and a number of smaller scale artefacts and memorabilia, all of which convey the human aspects of the story and a number of which introduce the sound into the building which Mr Bright complains is lacking.

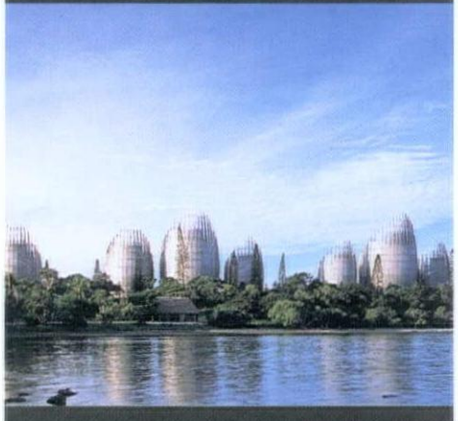
The presentation of the aircraft, of what they did, and of the people who flew and maintained them is deliberately bold, simple and, we think, successful, as is the outstandingly successful and efficient building which houses and preserves the aircraft themselves.

Yours etc

TED INMAN

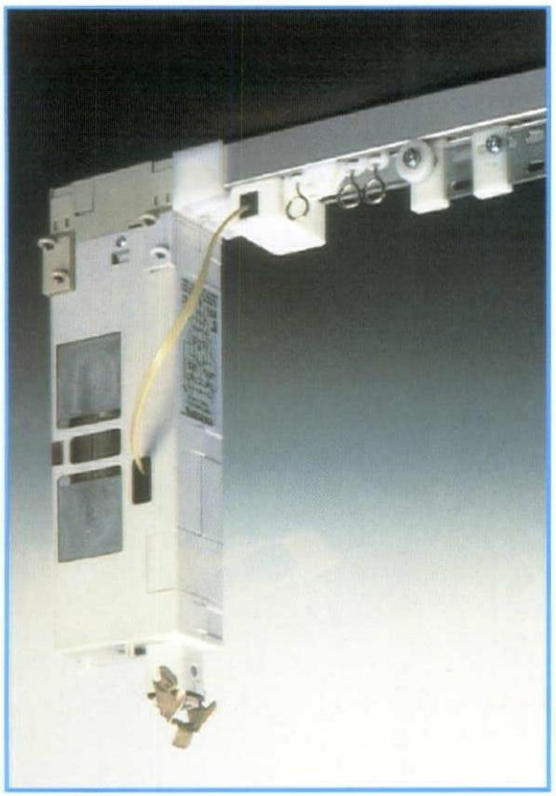
Director, Imperial War Museum Duxford, Cambridge

December



In December's issue, we examine the relationship between architecture and water. This vital natural resource permeates the natural world and all aspects of our existence. Throughout history, civilizations have exploited its forces, and myths and symbols have exhorted its power and versatility. It also has remarkable qualities, that stimulate all the senses. For centuries, the presence of water has inspired and enriched architecture and next month's issue considers current contemporary examples from around the world. The centrepiece is Renzo Piano's Tjibaou Cultural Centre in New Caledonia. Set on a stunning island site, the building is conceived as a centre for indigenous Kanak culture. Surrounded on three sides by water, the project expresses the immemorial traditions of the Pacific archipelagoes in a new and modern language.

Also in the December issue we look at an extraordinary new pier in Nagasaki, Japan, designed by Roto, which embraces local shipbuilding techniques, and an elegantly detailed floating restaurant on the River Douro in Oporto by Guilherme Páris Couto. Plus the usual fascinating mixture of Interior Design, Delight and View, and Books of the Year, our review of the best architectural publications of 1998. Have a very Merry Christmas – buy this and 11 other issues by filling in the enclosed subscription form.



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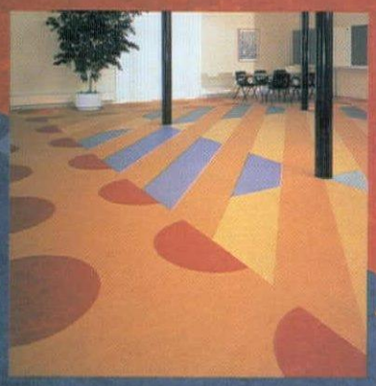
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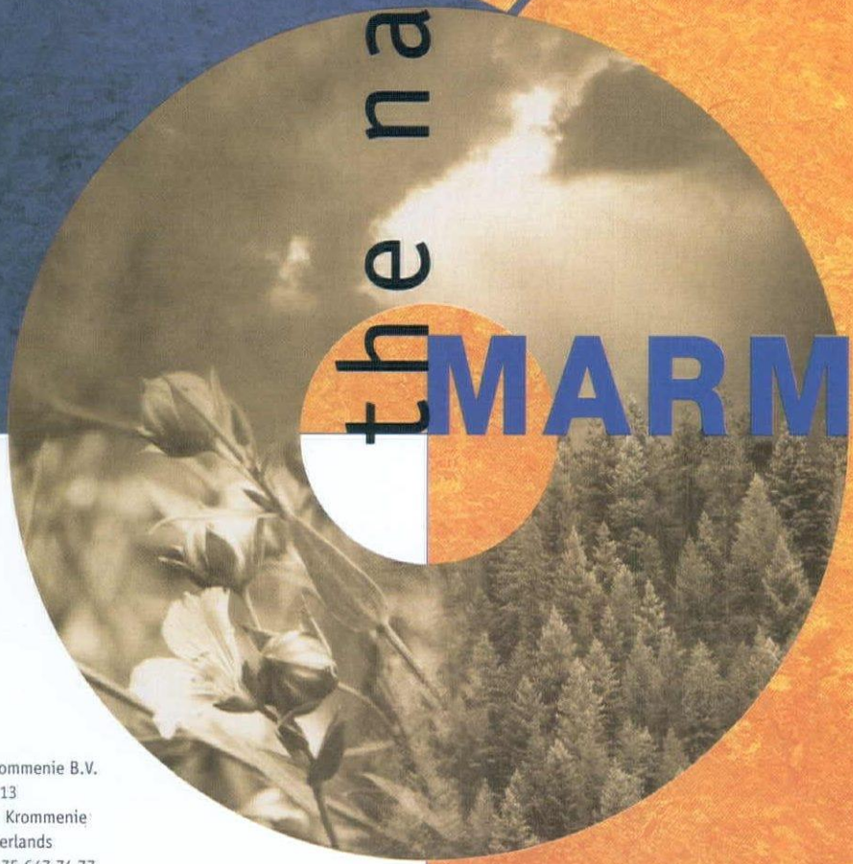
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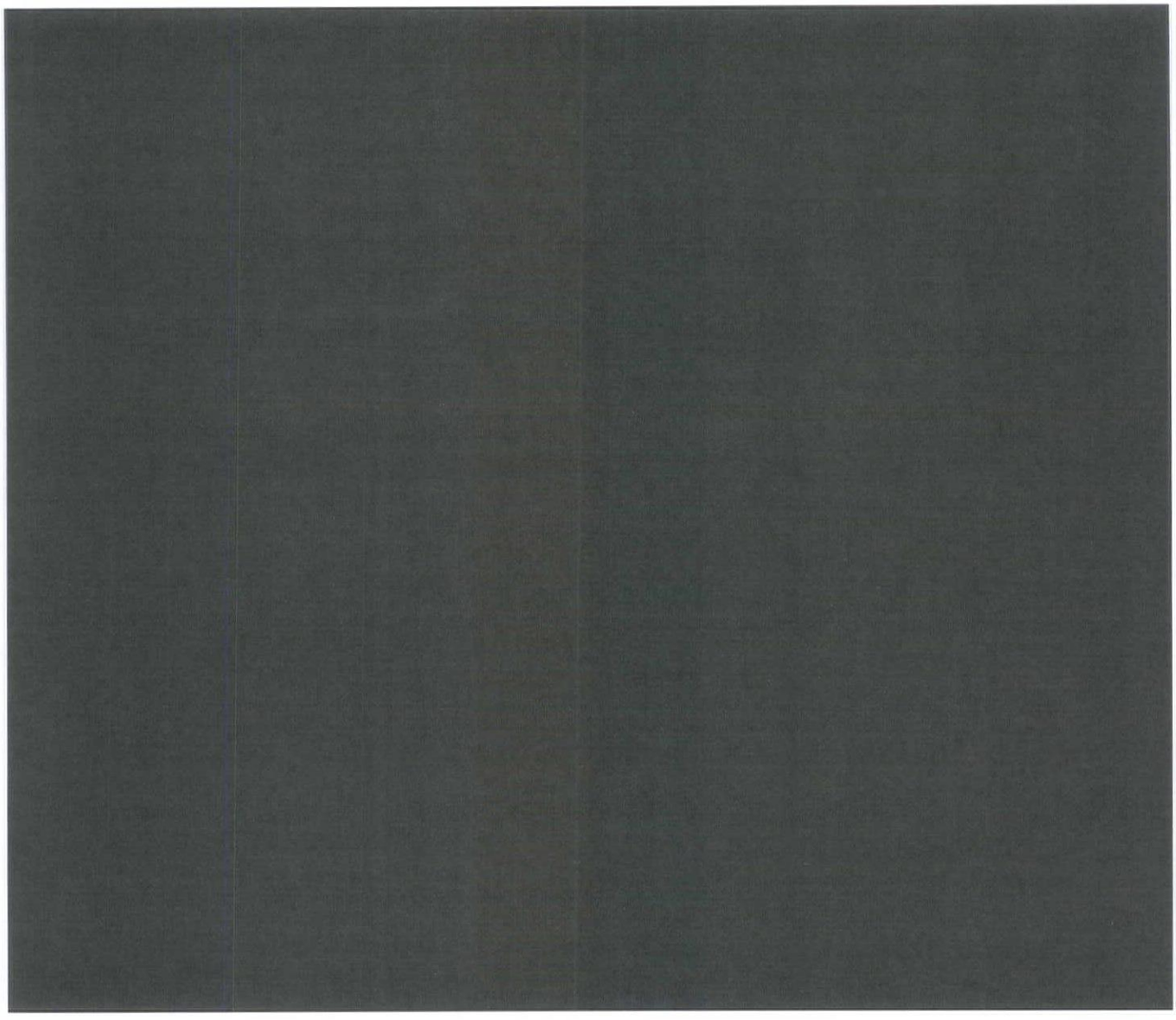
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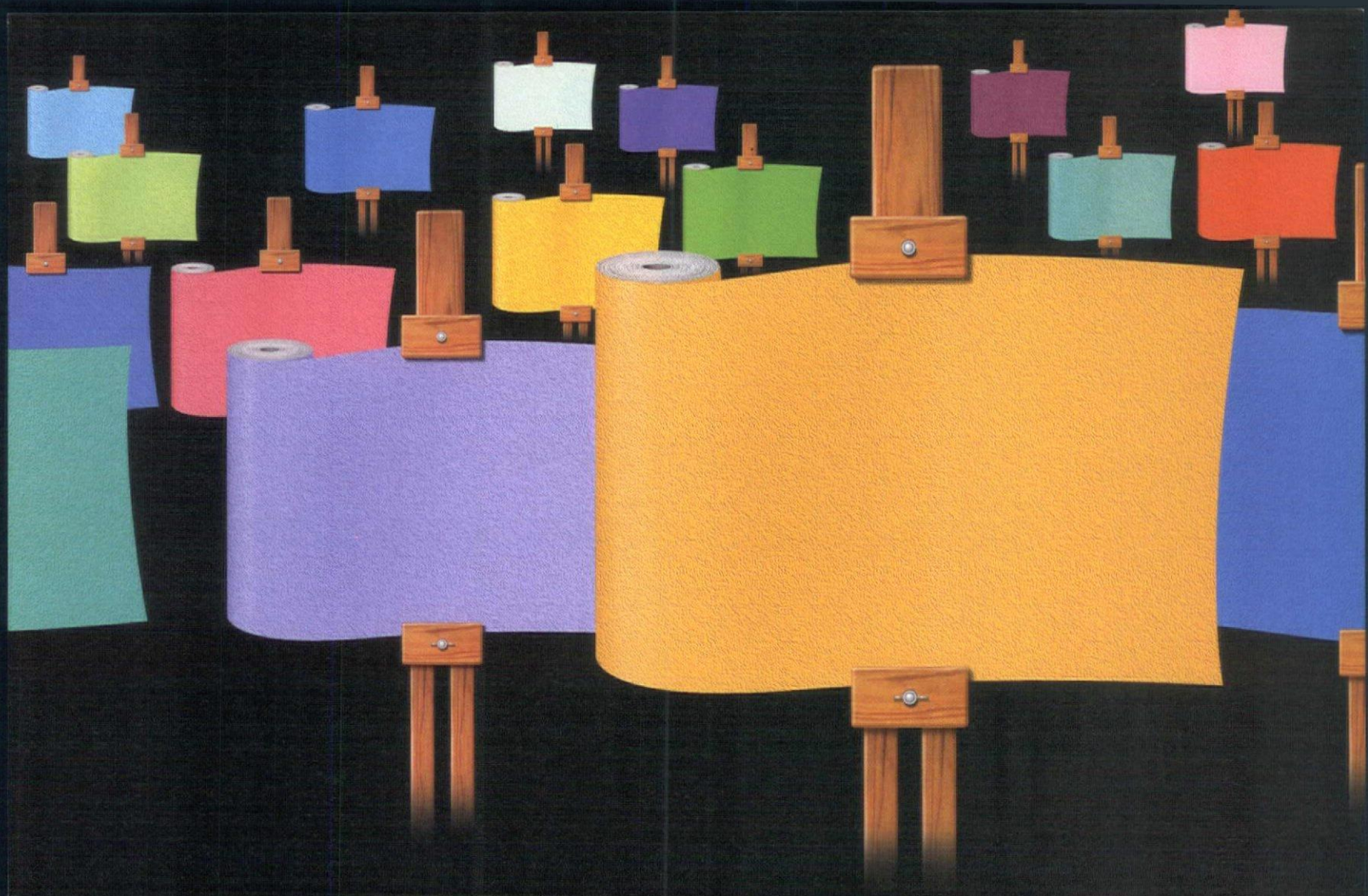


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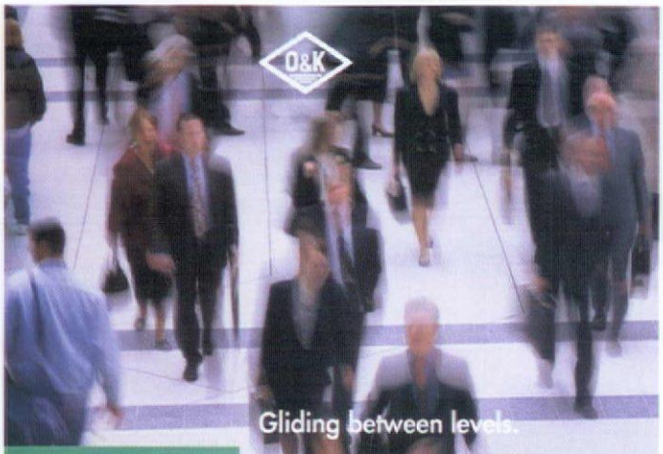
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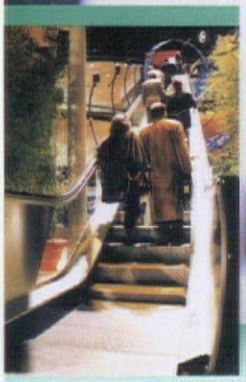
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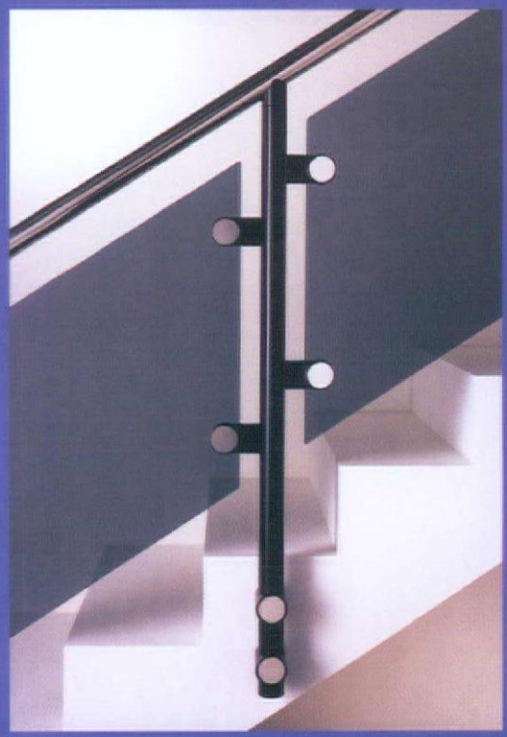
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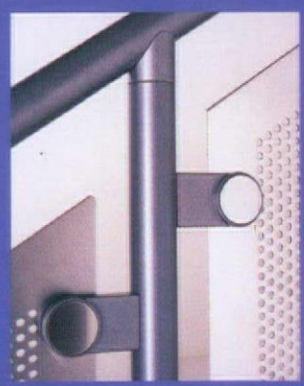
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site plan

Fruits of the forest

This proposal for a hotel village on the remote Honduran island of Guanaja draws its inspiration from the vividly coloured local houses dotted through the forest.

Lying in the Caribbean off the north coast of Honduras, the tiny island of Guanaja forms part of the Honduran Bahia Islands. The island's relatively prosperous local economy is based on intensive shrimp and lobster fishing supplemented by some tourism. Tourism is still quite rustic and underdeveloped, based around a handful of small hotels for deep sea diving enthusiasts. The island has the potential to attract more visitors, but the form and location of any new development is clearly a sensitive issue. The paradisial landscape of luxuriant vegetation, white beaches and coral reefs is diligently protected by government regulations.

The French architect Jean-Louis Godivier was asked to make a proposal for a small luxury hotel that both respected and responded to the extraordinary landscape. The site lies on the edge of the sea (close to the historic beach where Columbus landed in 1496) and slopes upward into lush tropical forest. Just offshore is a huge living coral reef where fishing and diving are prohibited. Godivier's proposal separates the hotel accommodation into a series of self-contained bungalows, scattered at irregular intervals over the tree covered hillside. A larger clubhouse building will provide dining and other facilities.

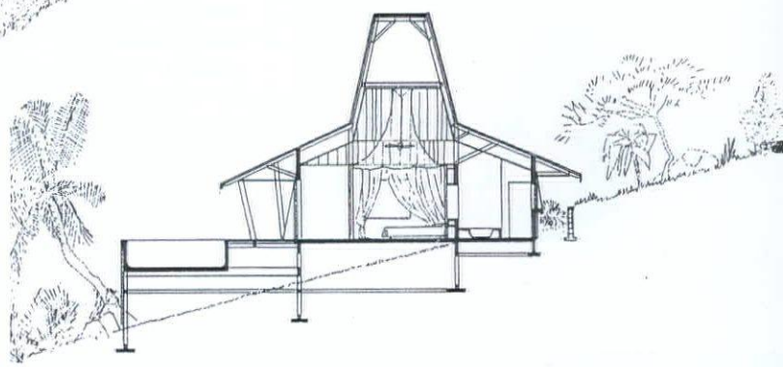
Godivier's bungalows take their cue from the brightly coloured indigenous houses scattered like a piquant visual seasoning through the green landscape. Part Bedouin tent, part spaceship, the bungalows have tall peaked roofs to encourage natural cooling and broad overhanging eaves to create sheltering verandas. There are four basic types of bungalow, each varying slightly in size and adaptable for different kinds of terrain. Colours are bold and sumptuous, inspired by the native Caribbean patterns that enliven the most meagre of dwellings. Poetically synthesizing modernity and tradition, Godivier's eye-catching structures are an intriguing departure from the conventional notion of the luxury hotel village. Like birds of paradise flashing through the forest, their vivid architectural plumage is a source of animation and delight.

C. S.

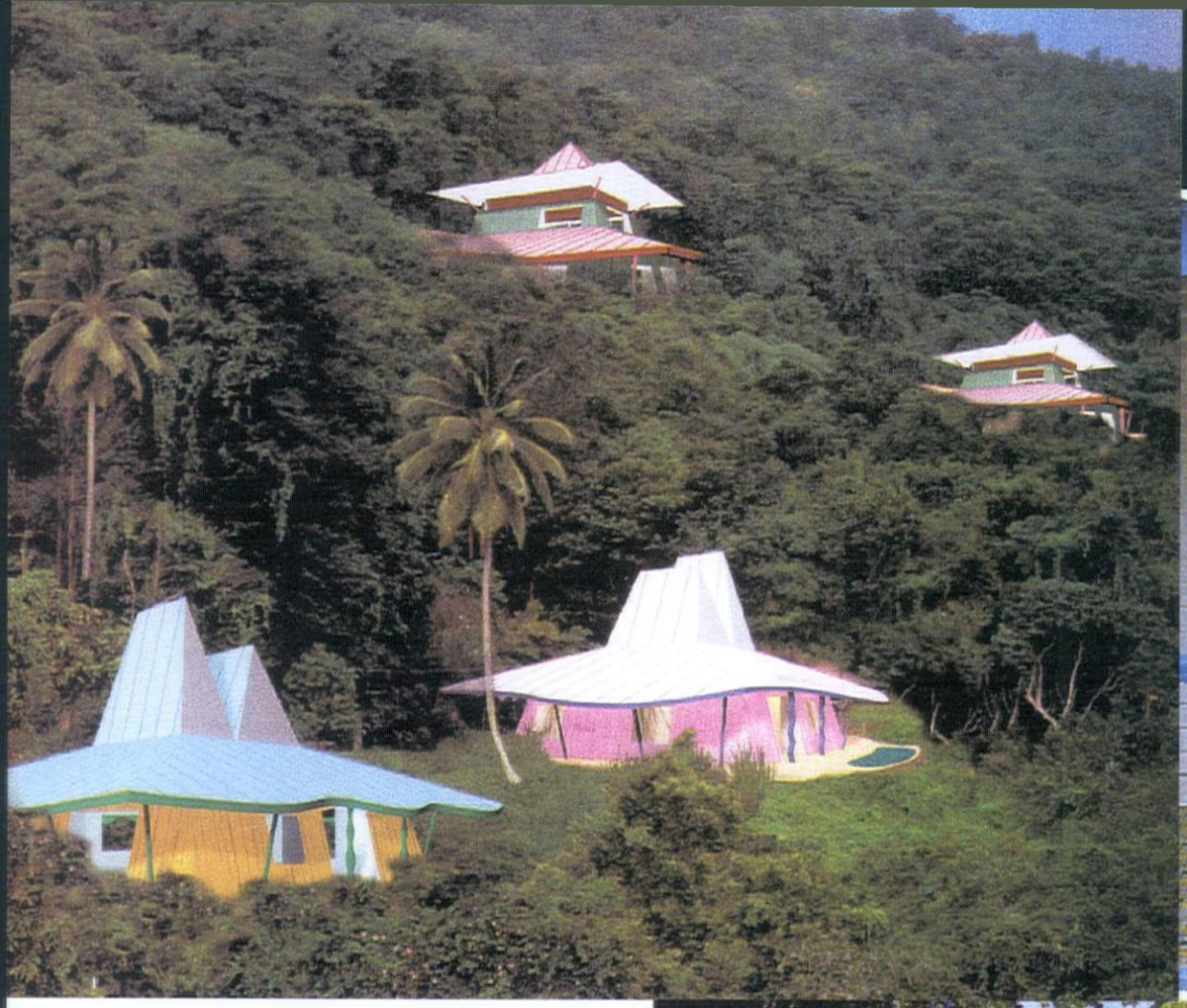
Architect
Jean Louis Godivier, Paris, France



cross section through bungalow on steep terrain



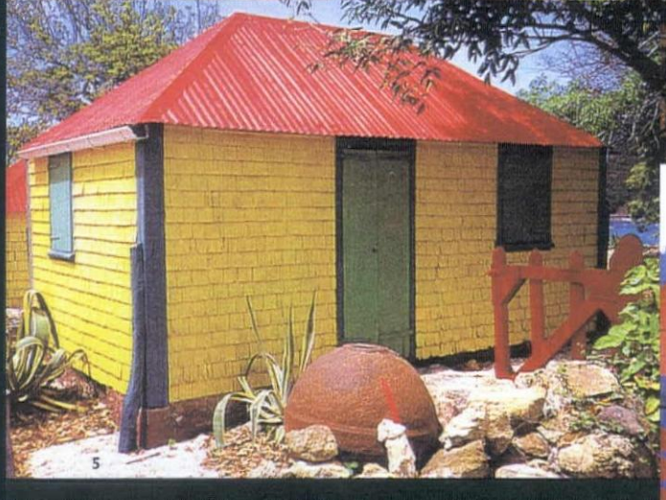
cross section through bungalow on moderately sloping terrain

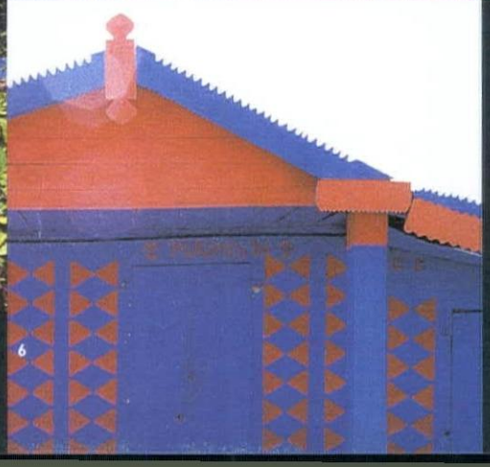






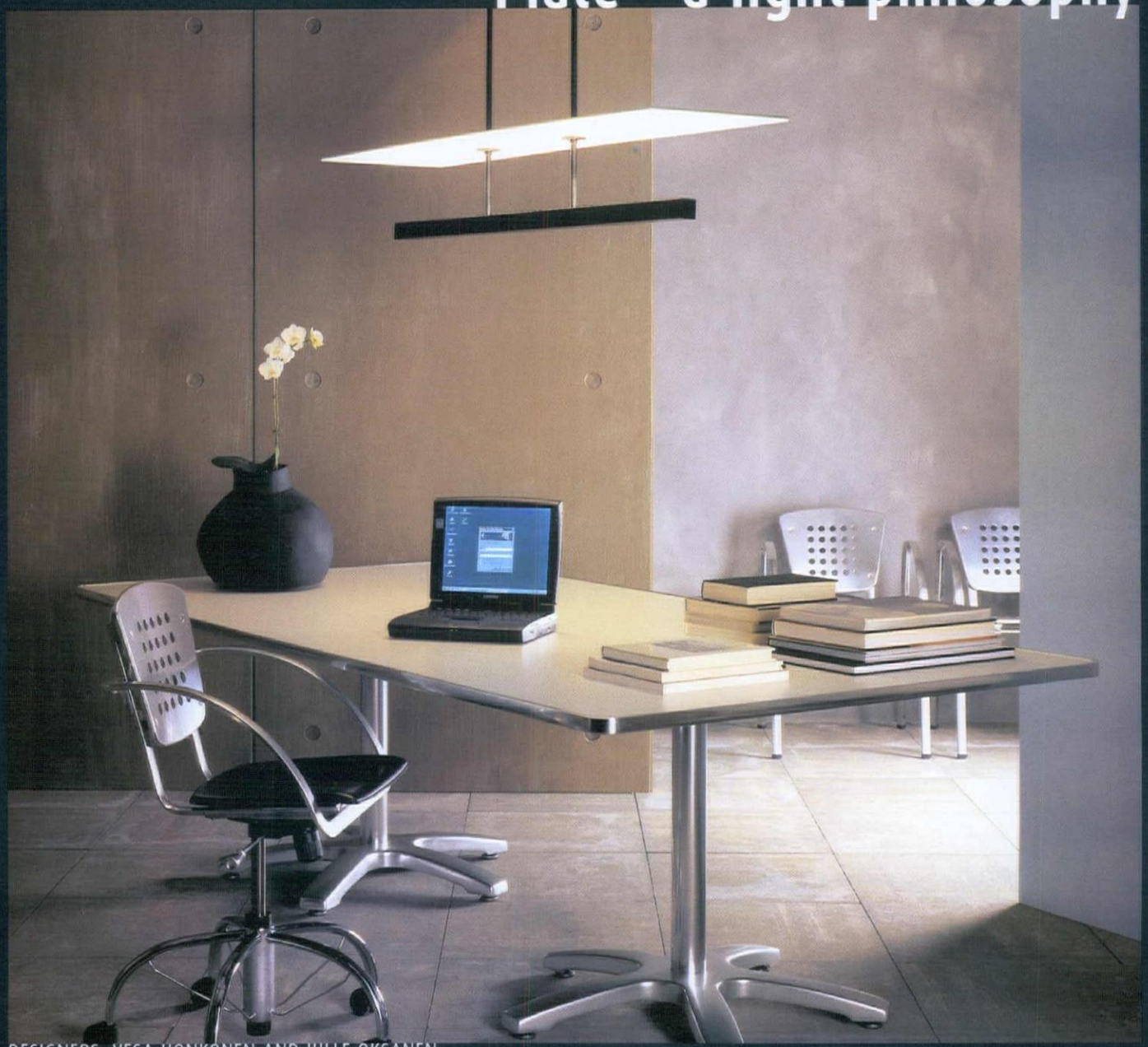






1
Montage showing the proposed bungalows in the steep hillside site.
2
The brightly coloured structures are a source of animation and delight amid the dense tropical forest.
3
Overhanging eaves provide shade and tall roofs encourage natural cooling.
4, 5, 6
Examples of existing island houses – vivid colour is used to enliven the most meagre of dwellings.

Plate – a light philosophy



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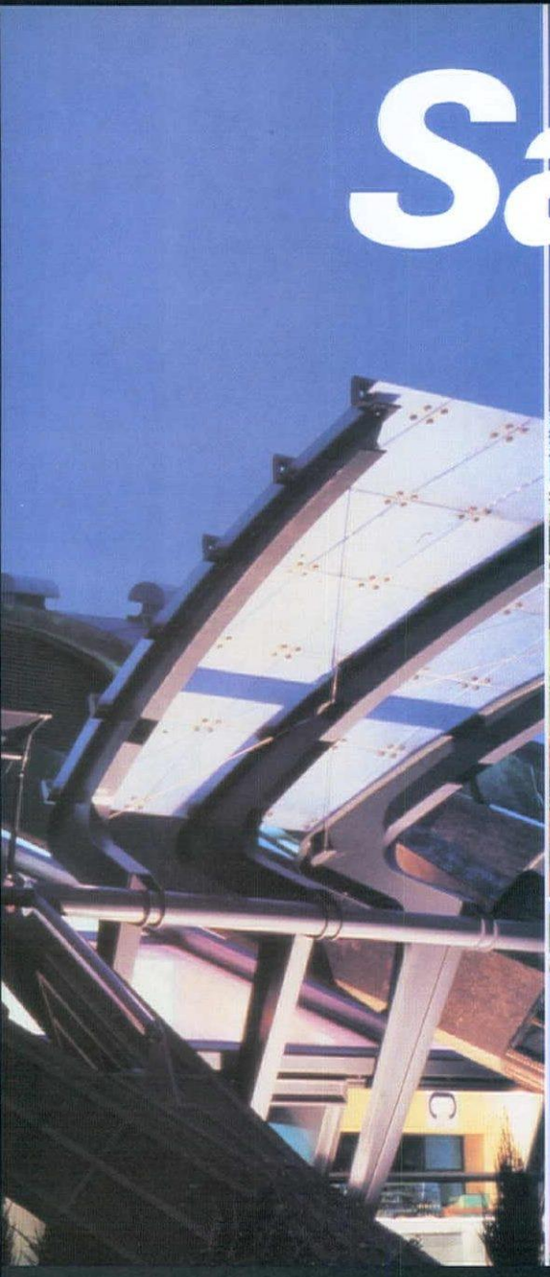
Material: Powder coated aluminium. Laminated glassplate, sandblasted and teflon coated for easy maintenance. Light source: Flourescent tube T5/16.

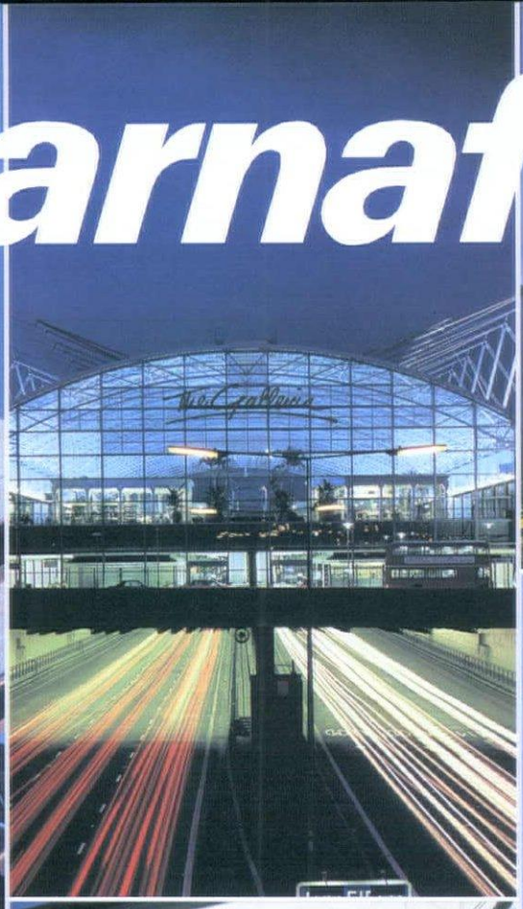
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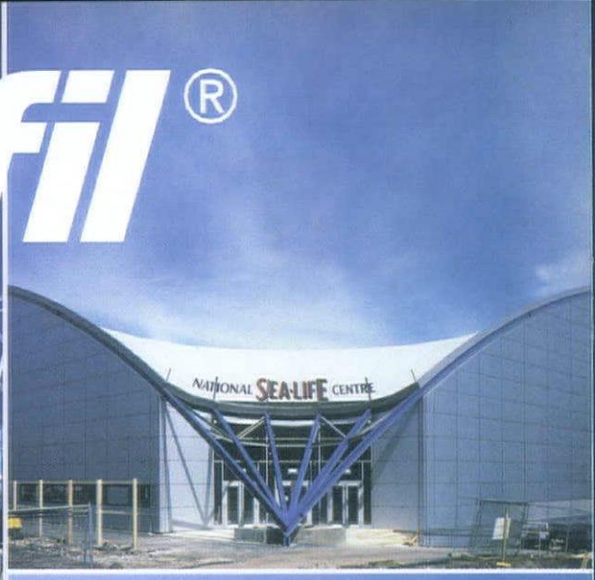
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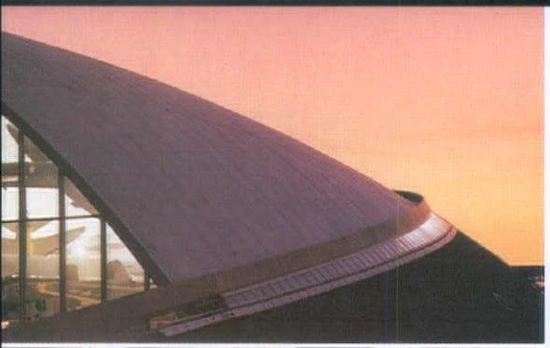








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Gottfried Semper's reconstruction of the rich interior polychromy of the ancient Hephaisteion in Athens, published in 1878.

TRUE COLOURS

The glorious polychromy of the past suggests a strong historical need for colour, despite current reductive fashions.

'People of refinement', remarked Goethe, 'have a disinclination to colours. This may be owing partly to weakness of sight, partly to the uncertainty of taste which readily takes refuge in absolute negation. Women now appear universally in white and men in black.'[1] Goethe wrote at the beginning of the nineteenth century, but his observations are almost equally applicable today: at any meeting of Western architects and designers almost everyone is clad in black (women having given up white for obvious reasons). And the principle of absolute negation applies equally to much of their output: white, relieved by a little black and the colour and texture of natural materials, with here and there perhaps a primary hue or two. Many people are scared to go further than this for fear of being thought of as frivolous or stale PoMos.

But this was not always so. Throughout most of the history of architecture, applying colour to buildings has been normal, not extraordinary. Indeed, it is perhaps a mark of civilization. We know that the Greek temples were highly coloured, and we have numerous suggestions of how they appeared, but most of us find it difficult to accept that they really did look like the hypothetical restorations of Semper and his followers. Certainly, no-one would now suggest that any one of them should be restored to its original polychromatic glory. The reasons for our revulsion at the prospect, and our pleasure in the unadorned marble are surely in part[2] due to that great shift in sensibility that occurred in the second half of the eighteenth century and the early nineteenth, when technology at last gave humanity a degree of control over the natural world which allowed us to find what once seemed frightening and primitive increasingly attractive and reassuring (for instance a mountain range, or the wood and stone of a peasant's hut).

The shift took place roughly between the time when Rousseau promulgated the notion of the noble savage to Thoreau's mystical sojourn by Walden Pond, in an age when he could hear the sounds of trains through the forest. The era marks the beginning of our appreciation of natural materials in architecture, and our distrust of applied colour – though of course the latter only gradually began to emerge later in a century which Le Corbusier decried as being invaded by a bourgeois spirit in 'all layers of society' which meant among other things that 'the wall had lost its architectural functions: from a formal plane, it had become the support of a changing application of fabric or paper tapestries'.[3]

Le Corbusier's essay on colour was part of his attempt to return it to architecture after it had been purged by a reaction against 'bourgeois taste' in the '20s (in which he was himself greatly involved). He wanted to find (or at least offer because, for once, he does admit to subjectivity) a system of standard architectural colours which were 'blue, in 3 or 4 values; red or pink; pale or dark green; yellow of ochres or of the earth', and of course white.[4] These, he said, could be found as the colours of buildings in all civilizations and folklore and, indeed, they are very similar to the colours for which Vitruvius gives elaborate recipes.[5] This is not entirely surprising, as Le Corbusier selected his tints from ranges commonly available from colourmen who had been making their pigments in roughly the same way since the times of the ancients. As Arthur Rüegg points out in his introduction to Le Corbusier's essay, the technology of colours changed radically after the Second World War, and 'the relationship with the "natural" pigments once used everywhere was thus lost; a multitude of different color cards took their place'.[6] Perhaps the very wideness of choice is one reason for our contemporary fear of colour.

In the pre-War period, Le Corbusier used colour to emphasize the nature of walls as planes emphasizing, or sometimes subverting,[7] the spatial and formal qualities of space and form. For instance, he believed (with countless others before and since) that colour modifies our appreciation of space: that 'Blue and its green combinations creates space ... distances the wall ... removes its quality of solidity ... Red (and its brown, orange etc ... combinations) fixes the wall, affirms its exact position, its presence'.[8] Further, colours have psychological and even physiological effects: 'to blue are attached subjective sensations, of softness, calm, of water-landscape, sea or sky. To red are attached sensations of force, of violence. Blue acts on the body as a calmative, red as a stimulant.'[9]

After the War, Le Corbusier altered his approach to colour, retaining his previous architectural palette but adding to it and making colour symbolic and didactic: using it to describe for instance the *tracés régulateurs* of the elevation of the pilgrimage house at Ronchamp.[10] This was a return to an attitude common among the non-whiteists of the early '20s, for instance de Stijl and the Berlin School in which Bruno Taut believed that it was a social duty of the architect to offer the inhabitants of social housing schemes 'an identification with their relatively modest living environment through the use of colour'.[11]

Colour as enhancer and modifier of space and form, colour as symbol, colour as generator of mood: it is again time to struggle to understand the wonderful complexities of colour. Our perceptions being an extraordinary combination of the Newtonian optics and the physiological and psychological perceptions investigated by Goethe and Le Corbusier, colour is elusive, not subjectable to any kind of rational system in its application. But as Fernand Léger emphasized, 'Man has need of colour for life: it is as necessary as water and fire'.[12] P. D.

1 von Goethe, Johann Wolfgang, *Theory of Colours*. Trans Charles Lock Eastlake in 1840 from the German 1810 edition. MIT Press, Cambridge and London, 1970, p329.

2 And perhaps also because of the impermanence of applied colour, particularly externally. Vitruvius gives a complicated method of preserving colours with wax in places 'where the sun and moon can send their brightness and their rays' (Vitruvius, *de Architectura*, trans Frank Granger, Harvard University Press and William Heinemann, London, 1970, Book VII, vol II p119.) For all the wax, the external polychromy of Classical times comes down to us only in the tiniest hints.

3 Le Corbusier, 'Architectural Polychromy', published for the first time in *Polychromie Architecturale*, edited Arthur Rüegg, Birkhäuser, Basel,1997, p109. The essay was written in the early 1930s in conjunction with Le Corbusier's extraordinary adventure into designing wallpapers for Salubra. The essay has never been published before, and is now offered in the original French, with parallel texts in very bizarre American, and German (the quality of which I am unable to judge). The three volume set includes Corb's text and Rüegg's scholarly introduction and near perfect samples of the wallpapers as well as the strange 'colour keyboards', an attempt, like the Modulor to give a systematic, almost scientific basis to essentially subjective matters. Le Corbusier liked plain coloured wallpaper because it did away with the need for three coats of oil paint.

4 *Ibid*, p101.

5 *Op cit*, Book VII, chapters VII-XIV.

6 Le Corbusier, *op cit*, p73.

7 'Polychromy (two colours, three colours, etc) destroys the pure form of an object [and] ... *allows one to appreciate in one volume only what one wishes to show*'. *Ibid*, p121. My italics. P.D.

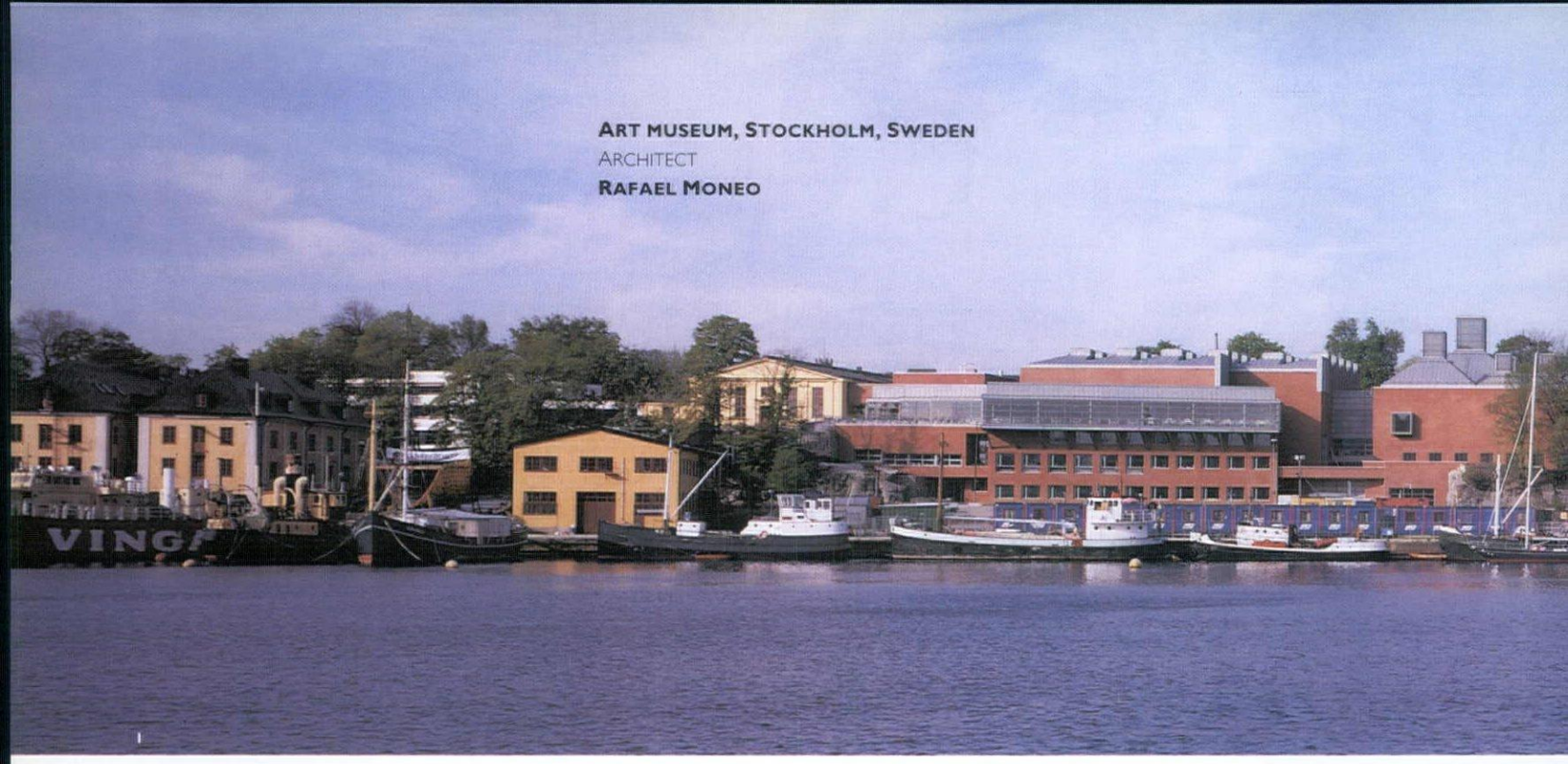
8 *Ibid*, p115.

9 *Idem*.

10 Rüegg, *ibid* pp 67-70.

11 Wick, Rainer, quoted by Rüegg, *ibid*, p35.

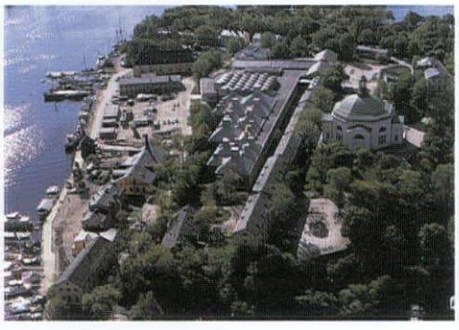
12 'L'homme a besoin de couleurs pour vivre, c'est un élément aussi nécessaire que l'eau et la feu'. Quoted by Le Corbusier *op cit*, p.140. My translation. P.D.



ART MUSEUM, STOCKHOLM, SWEDEN
ARCHITECT
RAFAEL MONEO

Spectacularly set on an island overlooking the city, Stockholm's Moderna Museet reflects the urbanistic and topographic character of its site and reinterprets the traditional Swedish use of strong external colour.

NORDIC LANTERN



1
The new museum in its Skeppsholmen island setting adds to one of the most dramatic city skylines in the Baltic. The congregation of lantern rooflights forms the building's dominant element.
2
Located on the eastern edge of the island, Moderna Museet takes its place among nineteenth-century relics of naval occupation.
3
Part of the narrow courtyard created between the new museum (left) and the existing linear volume of the Museum of Oriental Antiquities.
4
The museum's restaurant is cantilevered out over the ridge, with breathtaking views of the harbour.
5
Moneo's strategy of toplit volumes enclosed by a blind wall has an obvious affinity with traditional Spanish architecture.

The completion earlier this year of Sweden's new Museum of Modern Art (Moderna Museet) underpinned Stockholm's tenure as 1998 European City of Culture. The new museum provides space for the national collections of twentieth-century art and photographs, as well as the Swedish architectural archive. Originally housed in a nineteenth-century drill hall on the island of Skeppsholmen, the Moderna Museet has long been in pressing need of expansion. In spite of various improvements to the original building, the museum rapidly evolved, both physically and conceptually, beyond its impromptu beginnings in the mid 1950s.[1] Only a fraction of the collection could be shown and much of this had to be stored to make way for large temporary exhibitions. The incorporation of the national photographic collection in 1973 exacerbated the problem of space and the building lacked permanent facilities for presenting the museum's pioneering collection of artists' films and videos. By the end of the 1980s, Moderna was simply too cramped for its skin and drastic action was needed.

In 1990 the Swedish government instigated a competition for the museum's redevelopment. Open to all Swedish architects and five invited foreigners,[2] the complex brief included a museum of contemporary art, a museum of architecture, a dedicated gallery for temporary exhibitions, facilities for showing film and video and a library. Intended to provide an extra 20 000 sq m of public space, the new development effectively quadrupled the museum's existing capacity. In view of the competition's evident and understandable bias towards Scandinavian architects, it was perhaps surprising that the winner should be a southern European, Rafael Moneo. However the jury's decision was not as unexpected as it might seem. As a student, Moneo worked in Utzon's office and travelled extensively around Scandinavia, absorbing the influences of Asplund, Lewerentz and Aalto.

Moneo's Moderna Museet is unequivocally contemporary, yet its also seeks to reflect the topographic and urbanistic character of its site. Set like a green lung in the centre of Stockholm's harbour, the tiny island of Skeppsholmen was formerly a base for the Swedish navy. Since the navy's departure in the 1950s, the nineteenth-century barracks and admiralty buildings have been appropriated for various cultural functions, including a theatre, school of fine arts and the Museum of Oriental Antiquities. Crowned by Fredrik Blom's octagonal church, the island's rocky outcrops afford











ART MUSEUM, STOCKHOLM, SWEDEN
ARCHITECT
RAFAEL MONEO

splendid vistas across the harbour to one of the most remarkable skylines in the Baltic.

The Moderna Museet is set on a ridge on Skeppsholm's eastern edge. To the west lies the linear volume of the Museum of Oriental Antiquities, housed in a former rope-walk. Taking advantage of the steep terrain, the new building is excavated into the rock, minimizing its bulk. The resulting parti is both elegant and economical. A sequence of toplit, pavilion-like galleries occupies the main ground floor, with assorted cultural and administrative facilities arranged on two lower subterranean levels. The cluster of linked pavilions consciously echoes the incremental, anti-monumental character of the island's architecture. On its south side, the new building is joined to the existing drill hall, now transformed into the Museum of Architecture. This in turn is united with a sleek, white rendered volume, also designed by Moneo, housing architectural archives, offices and a library.

The exterior is at its most striking when viewed from some distance across the harbour. The roofscape of angular lanterns recalls the familiar historic forms of maritime architecture and boat building cranes. At dusk the dark mass of the museum is articulated by the soft glow of light diffused through the pyramidal roofs. Moneo intended that the museum should appear to evolve organically out of the ridge, and initially stipulated a pale grey render for the exterior, which would also contrast with the traditional Swedish yellow ochre of the surrounding buildings. This was modified following discussions with the city planners, who felt that grey would be too drab in Stockholm's Nordic climate. The final compromise is a rich terracotta, possibly more Mediterranean than Nordic, but enticingly partnered with a grey zinc roof. The terracotta also serves to emphasize the building's inscrutable, alcázar-like quality; the arrangement of neutral, toplit containers enclosed by a blind wall has obvious affinities with Spanish architecture.

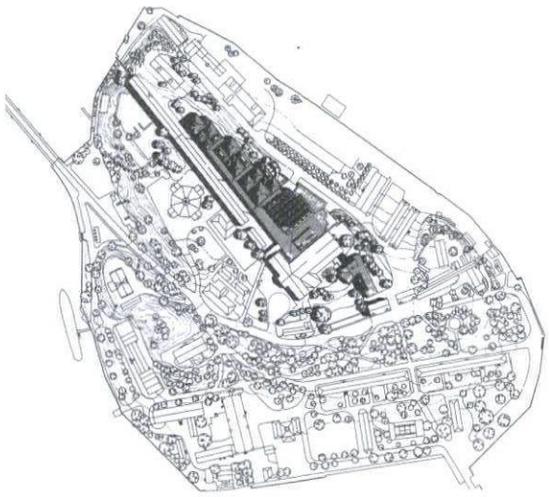
From the main public approach on the west side, the museum's presence is virtually undetectable, concealed behind a long stone wall. An understated portico leads through to a generously proportioned entrance hall, the building's organizational fulcrum. From here you can begin the circuit of galleries, or move through to the adjoining Architecture Museum. On axis lies the museum's restaurant, a transparent volume theatrically cantilevered out over the ridge with thrilling views of the harbour. A broad flight of limestone stairs leads down to the cinema, library and blind box exhibition spaces on the lower levels. The architecture is vertically led, with the lantern-lights and cupolas of the galleries generating the geometry of the rooms, and the lower floors serving as a supportive foundation for the *piano nobile* gallery level. Verticality and the

6
Entry is marked by a minimal portico set along the north edge of the existing nineteenth-century drill hall (right), now converted to house the new Museum of Architecture.
7, 8
Crisp, white rendered volumes house the Museum of Architecture's archives, offices and library.

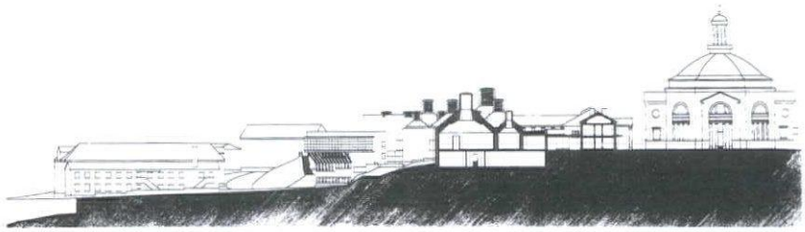








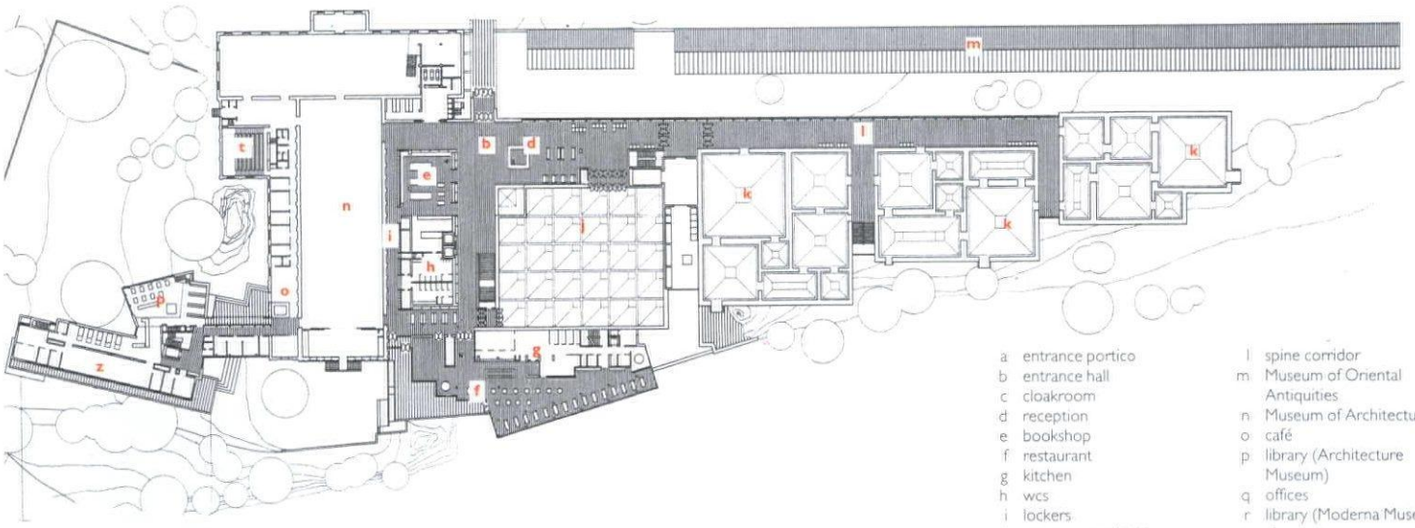
site plan



cross section

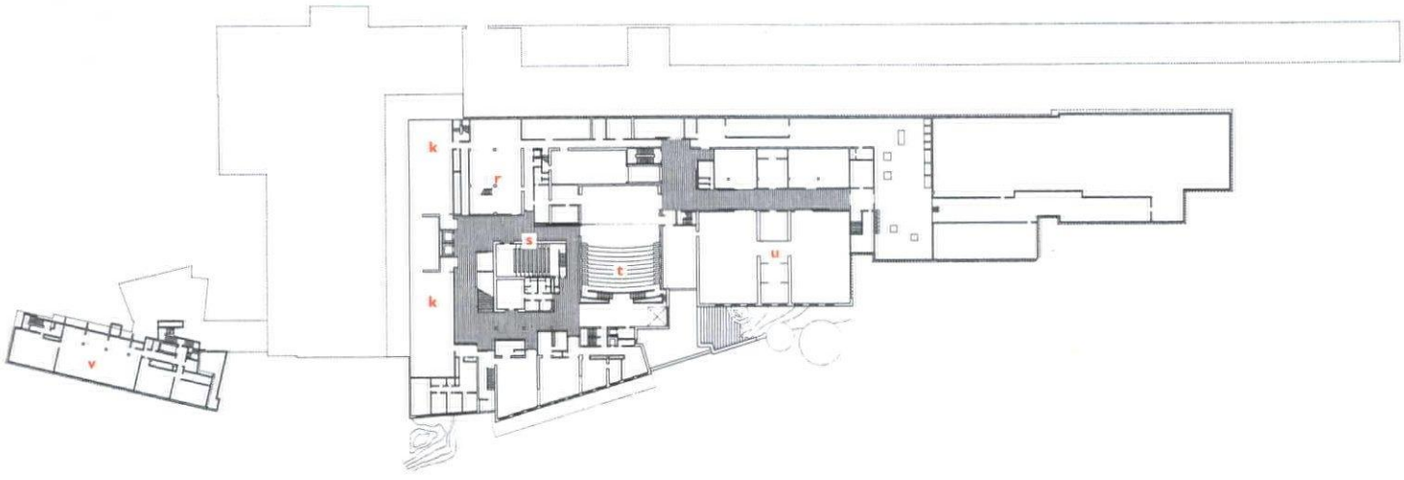


longitudinal section



ground floor plan (scale approx 1:1250)

a entrance portico
b entrance hall
c cloakroom
d reception
e bookshop
f restaurant
g kitchen
h wcs
i lockers
j temporary exhibition gallery
k permanent collection galleries
l spine corridor
m Museum of Oriental Antiquities
n Museum of Architecture
o café
p library (Architecture Museum)
q offices
r library (Moderna Museet)
s cinema
t auditorium
u conservation
v workshops



lower ground floor plan

ART MUSEUM, STOCKHOLM, SWEDEN
ARCHITECT
RAFAEL MONEO

relationship of vertical elements have preoccupied Moneo for some time, for instance the Roman Museum at Mérida (AR November 1985) with its tall brick vaults and the Davis Museum at Wellesley College in Massachusetts which explores a similar system of interlocking roof lanterns.

Moderna reflects the landscape of Skeppsholmen, but is also itself a landscape, an aggregation of linked parts. The lantern-lit galleries are each independent entities, varying in size around a 6 metre square module, but they also make up groups of six or seven rooms that create separate figures of their own. These groupings are arranged off a spinal corridor that runs along the west side of the building, overlooking a narrow courtyard bounded by the long yellow flank of the Museum of Oriental Antiquities. The largest single gallery is an imposing 18m square hall for temporary exhibitions, that can be subdivided as required. Three clusters of smaller galleries house the museum's permanent collection of contemporary art, international avant garde, and twentieth-century Swedish painting. Changes of axis and informal massing give the spaces a maze-like complexity and intimacy. Plain oak floors bordered with strips of limestone reinforce the museum's theme of material refinement and austerity. Cool, white gallery walls are washed with a very low level of natural light (a curatorial imperative), filtered through fixed louvres in the lanterns. Unobtrusive spotlights set around the ceiling edges come into play on gloomier days.

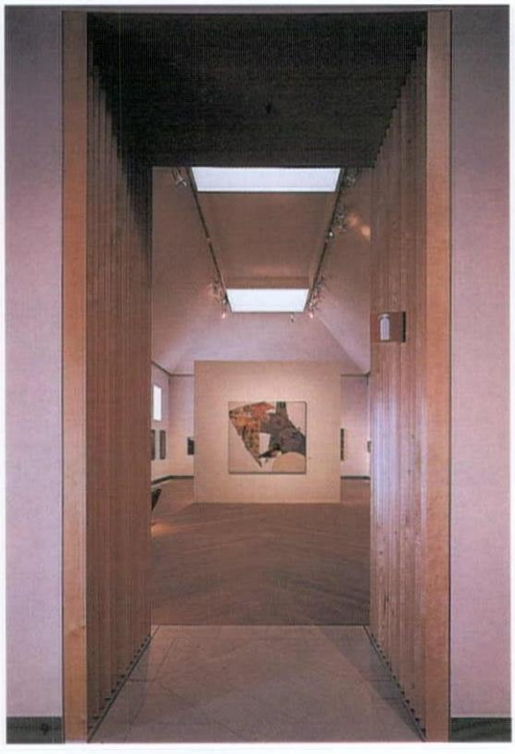
Anchored to the living rock of the island, Moderna is a response to the fragmented geography of Stockholm, rich in accident and surprise. The museum's orthogonal geometry tactfully overlays nature, but does not subdue it. In the Swedish tradition of minimal intervention, it combines discretion and seriousness of purpose, yet it also has a powerful civic presence, particularly when seen from afar, and makes a dignified and dramatic addition to Stockholm's skyline.

EDITH ERICSSON

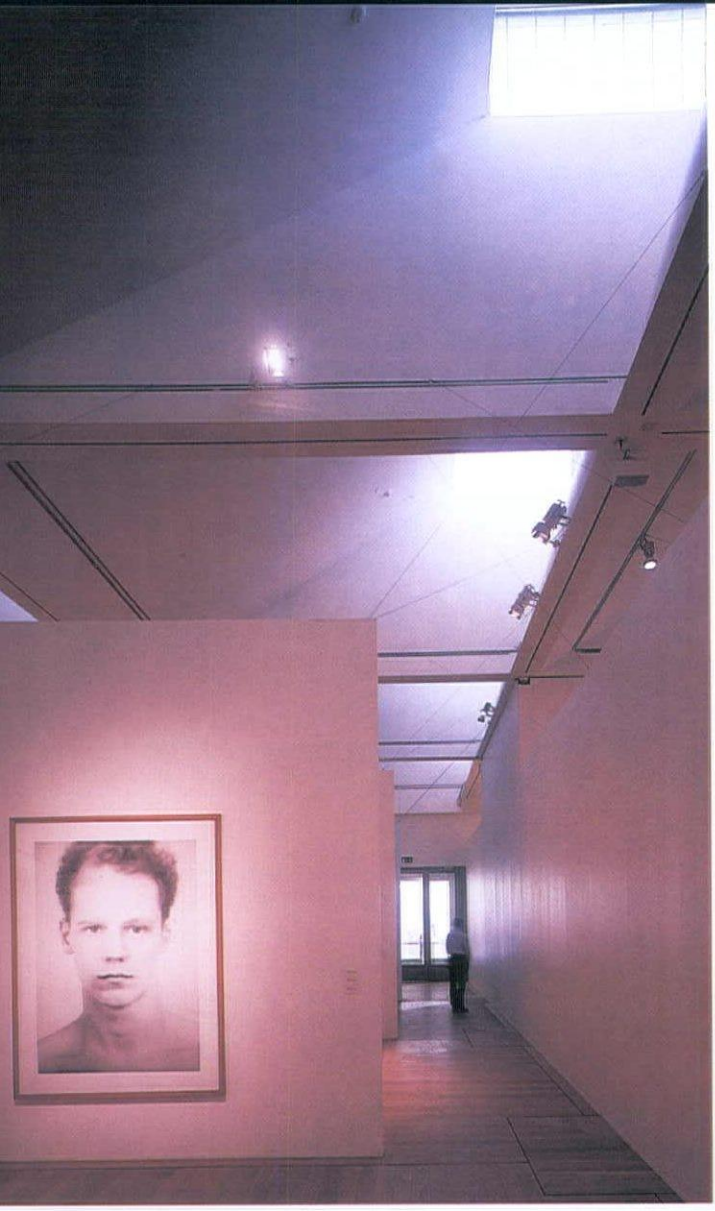
1 In 1953 the painter Otte Sköld (at one time director of the Swedish National Art Collections) persuaded the government to create a museum specifically for twentieth-century art. In 1956 work began on converting the former naval drill hall (the House of Exercise) on Skeppsholmen and in the same year Picasso's *Guernica* was shown in the partially converted building. In 1958 Moderna Museet was formally inaugurated.
2 The five invited non-Swedish architects were Tadao Ando (Japan), Kristian Gullichsen (Finland), Jørn Utzon (Denmark), Frank Gehry (USA) and Rafael Moneo (Spain). Gehry chose not to submit an entry.

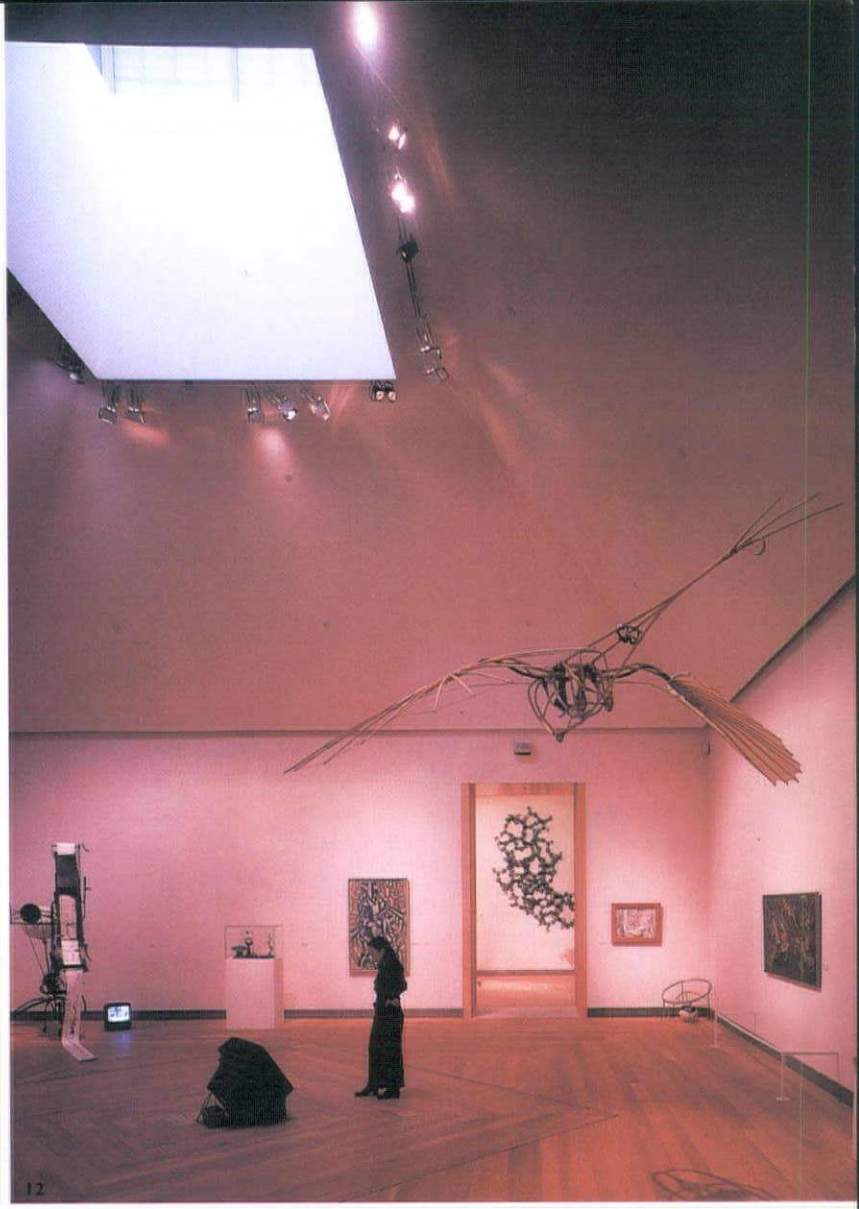
Architect
Rafael Moneo, Madrid, Spain
Project architects
Rafael Moneo, Belén Moneo, Jeff Brock
Associate architect
White Arkitekter
Structural engineer
Tyréns Byggkonsult
Interior designer
Thomas Sandell
Photographs
Duccio Malagamba

9
Interlocking galleries are cool, neutral containers, toplit by roof lanterns.
10
Main auditorium at lower level, one of a series of blind box volumes that forms a foundation for the galleries above.
11
Part of the square hall devoted to temporary exhibitions. This forms the largest gallery space and can be subdivided as necessary.
12
One of the galleries housing the museum's permanent collection. Low lighting levels were a curatorial requirement. Daylight is filtered and diffused through fixed louvres in the roof lanterns.
13
Breakout space next to the auditorium at lower level.









12



THEATRE, VALENCIENNES, FRANCE
ARCHITECTS
EMMANUEL BLAMONT & LOU CAROSO NEIVA

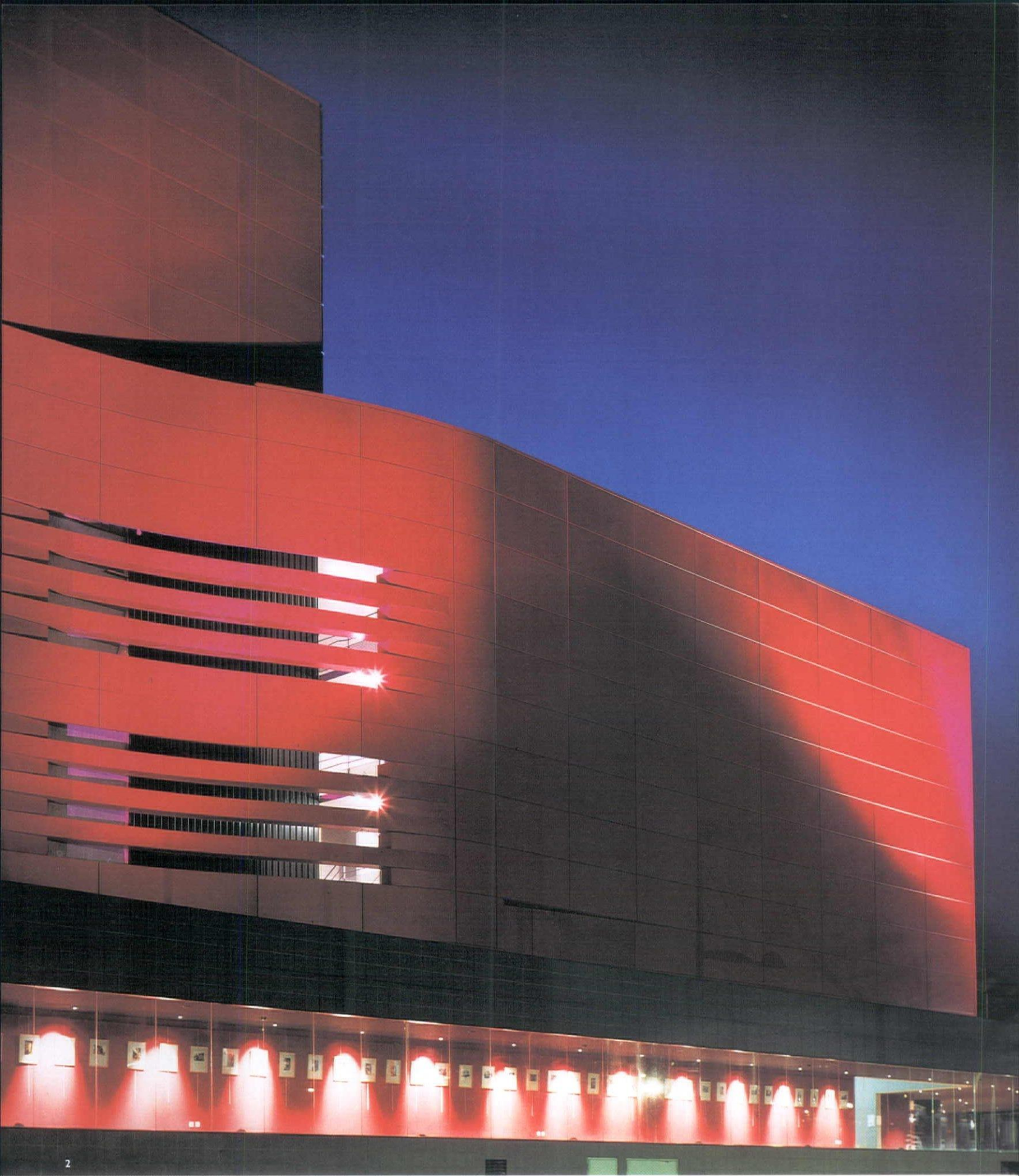
SCARLET AND BLACK

A curvaceous and colourful new theatre forms the focus of a major regeneration plan to stimulate the cultural and economic fortunes of Valenciennes.

Like nearby Douai, Mauberge and Mons, Valenciennes is set above extensive coalfields which straddle the Franco-Belgian border. By the end of the 1930s, decline in local coal-related industries had left Valenciennes with 21 per cent unemployment (set against a regional average of 16 per cent and a national average of 12 per cent). Cultural facilities are deemed essential to attract new employers to the town and Valenciennes once prided itself on being 'the Athens of the North'. Local artists include the great painter Jean Antoine Watteau, his nephews Louis and François Watteau and sculptors Henri Lemaire and Jean Baptiste Carpeaux. Both its Beaux-Arts Museum and public library boast outstanding historic collections (mostly acquired from church and aristocracy during the Revolution) and it now has a university. But the town theatre was destroyed during the Second World War and, as one local councillor remarked, 'nobody is much impressed by what we have, they expect such things. Potential employers will not even consider a town that lacks a theatre'.

The local council decided to make a new theatre the focus of a major urban regeneration

1



2

1
The new theatre extends to embrace its audience. The sleek red external carapace acts as background for the projection of forthcoming attractions.
2
The red volume erupts from a black plinth, representing new life emerging from Valenciennes' industrial past.

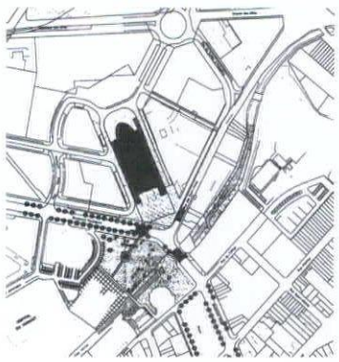
THEATRE, VALENCIENNES, FRANCE
ARCHITECTS
EMMANUEL BLAMONT & LOU CAROSO NEIVA

programme for a 13 hectare site formerly occupied by a long-disused industrial complex located just north of the old town boundary. The proposed redevelopment of this site is envisaged as a link between a planned suburban business park and the existing quartier des Cannoniers,* an enclave containing an imposing eighteenth-century hospital and several large redundant military barracks (some now converted for university use).

Having won the competition for the design of the theatre in 1990, Blamont & Caroso Neïva submitted their detailed proposal in December 1992. A long delay followed while funding was negotiated and the completed building was not inaugurated until January of this year. Building costs of nearly 119 million FF were divided between the town council, the Nord-Pas-de-Calais region, the Nord *département*, central government and the European community.

Blamont & Caroso Neïva describe their new Phénix theatre as 'a red object erupting through a black mineral crust – new life emerging from an industrial past based on local coal'. To cater for performance arts of all kinds – theatre, dance, cabaret, solo comedians, a wide variety of concerts and (very rarely) film – the Phénix has two auditoria. The main auditorium is designed to evoke a traditional Italian theatre, with stalls, dress circle and galleries providing a total of 800 places. Sinuous, purpose-designed seating by Thomas Klug contributes to the general effect. Here, the main stage is fully equipped with fly-tower, traps and cellar. Optional extras include an apron extension or a narrow orchestra pit, either of which entails the removal of a few rows of seating. The second auditorium, which is smaller and more basic, can accommodate 200 seated spectators or nearly 600 standing. The two auditoria can be united by opening up the shared backstage area between the two stages – an arrangement that also enables scenery, or whole sets, to be shifted from one stage to the other.

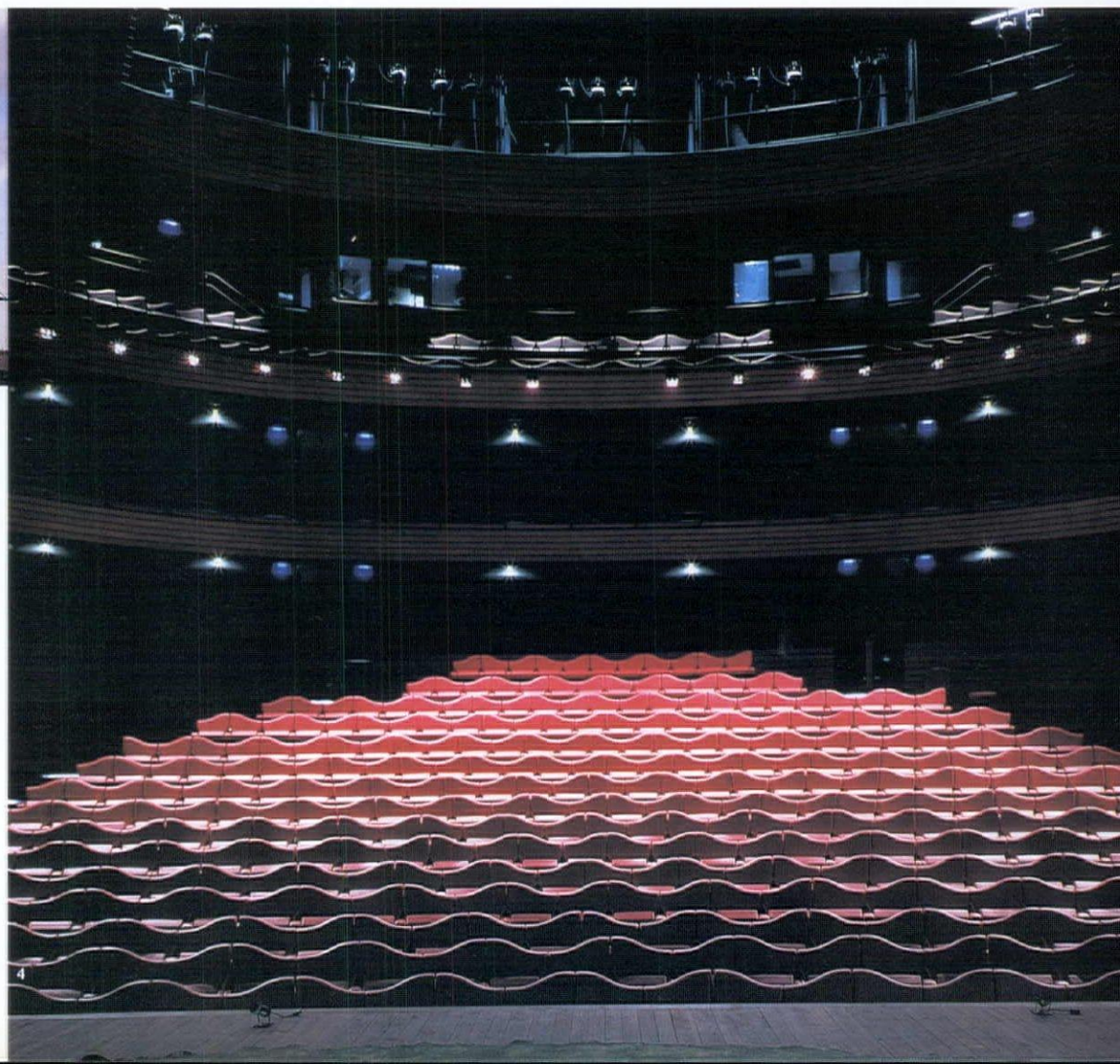
The red-and-black theme is pursued in the building's other main public spaces. After the coal-black forecourt, there are black-painted walls, reddish wood floors and white ceilings of



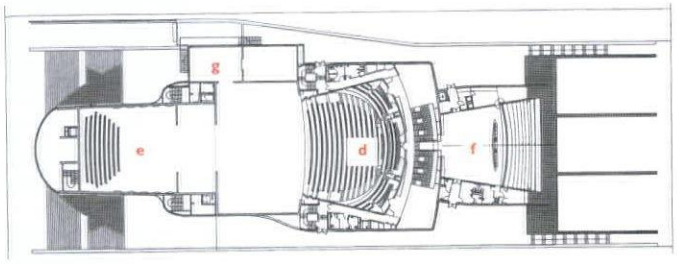
site plan

3
The imposing red form of the theatre is an important new civic landmark. Cultural facilities are seen as crucial to the town's economic revival.
4
The main auditorium is based on a traditional Italian horseshoe plan.
5
Curvaceous custom-designed seating by Thomas Klug animates the main auditorium.

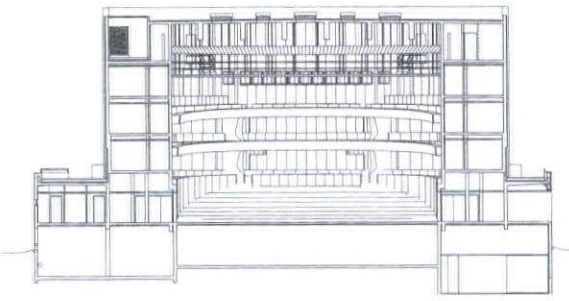




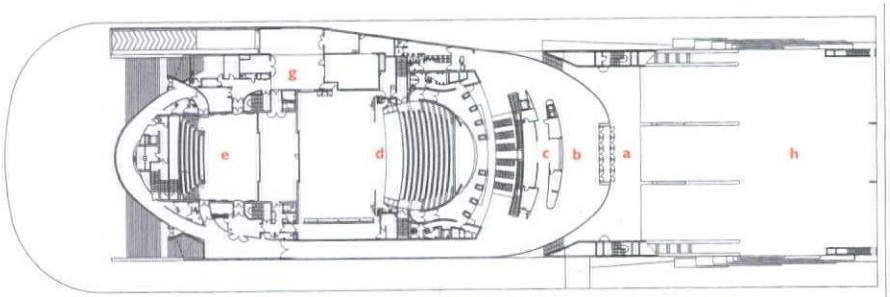
5



first floor plan

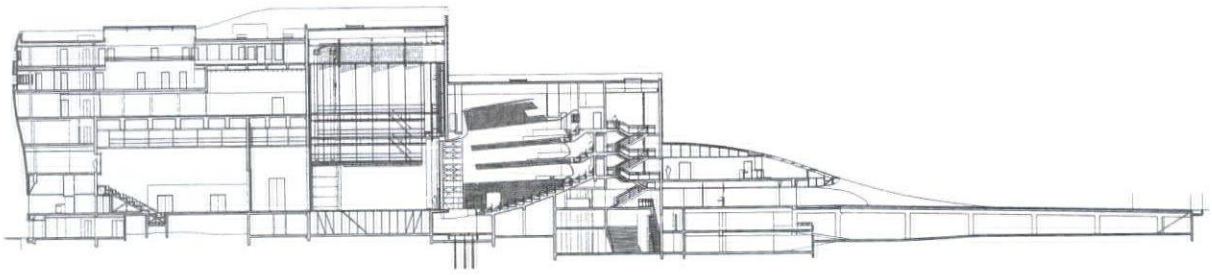


cross section



ground floor plan (scale approx 1:2000)

a entrance
b foyer
c foyer bar
d main auditorium
e secondary auditorium
f café
g backstage facilities
h public concourse



longitudinal section

THEATRE, VALENCIENNES, FRANCE
ARCHITECTS
EMMANUEL BLAMONT & LOU CAROSO NEIVA

the main entrance. Beyond, red-walled circulation routes culminate in the main foyer where multiple flights of stairs lead up to the bar and to the various seating levels in the main auditorium. By contrast, backstage areas are rigorously functional and, in the main, painted battleship grey.

A subterranean exhibition space, underground car park and, on upper floor levels, staff accommodation for the 20 strong management team, lodgings for visiting companies and a 300 sq m subdivisible teaching and rehearsal space are also provided. The management team is well pleased with the building. The initial programme of events, staged from 26 January to 5 June attracted 2560 subscriptions and 23 800 spectators, while the 1998-99 season has already generated considerable interest – not least a series of four-hour Friday evening theatre classes open to anyone over 12, for which, encouragingly, nearly 200 local people turned up to enrol.

The Phénix belongs to the same generation of French provincial *grands projets* as Ibos & Vitart's remodelling and extension of the Beaux-Arts museum in Lille (AR September 1997). Like Ibos and Vitart, Blamont was an associate of Jean Nouvel during the late 1980s where he was much involved with the Opera House projects for Lyons (AR October 1993) and Tokyo (1996, unbuilt). He acknowledges the family resemblance between the Tokyo project and the Valenciennes theatre, which he attributes to programmatic similarities and a desire to pursue a line of enquiry that could not be fully developed in an unbuilt competition project.

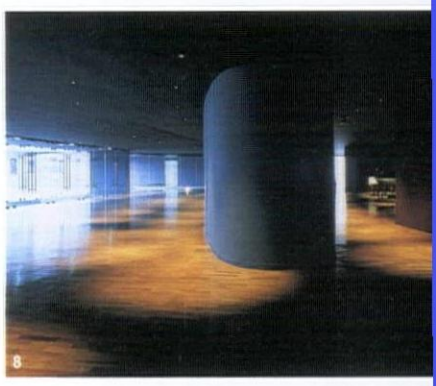
If the setting of the Phénix remains somewhat raw, Valenciennes has gained a creditable example of the cultural architecture engendered by the centre-left in late twentieth-century Europe, to add to the traces of a past shaped in turn by Flemish, Burgundian, Spanish and (from 1677) French influences. The latest addition is a notable contribution to the town's cultural and, hopefully, economic evolution.

CHARLOTTE ELLIS

Architect
Emmanuel Blamont & Lou Caroso Neiva, Paris
Project team
Emmanuel Blamont, Lou Caroso Neiva, François Lemoine, Didier Onde, Sophie Thomas
Associate architect
Blandine Roche, Patrick Fagnoni
Cost consultants
Khephren, ATEC
Structural engineer
Khephren
Services engineer
Alto
Acoustic consultant
Albert Yaying Xu
Seating
Thomas Klug/Poltrona Frau
Photographs
Robert Cesar/Archipress

* For an illustrated account of Valenciennes from mediaeval times, with particular reference to the development of the quartier des Canonniers, see: *Valenciennes: Les Canonniers*, J.-L. Borloo, W. Maufroy, P. Pinon, J. Méreau and M. Culot, IFA/Norma, Paris, 1998.



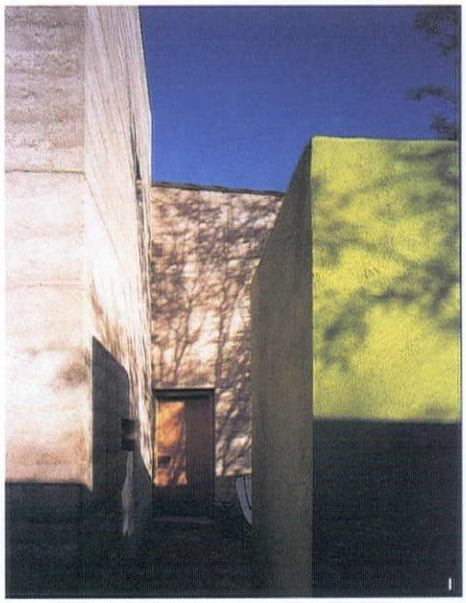




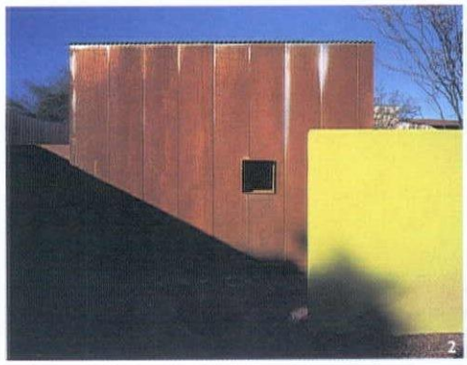
6
Vertiginous flights of stairs leading up to the auditorium dramatically bisect the foyer.
7, 8
The glazed foyer is conceived as an extension of the public space.

When Rick Joy got the site in Convent Street, Tucson, it was in a very decayed condition. A fragment of one of the seven original houses remained on the street front but, elsewhere, original adobe walls were dissolving back into the ground from which they came. Convent Street is in the Barrio Historico, one of the oldest neighbourhoods of the city, dense and with an unusual (for the US) mixed population of poor and prosperous, young and old. The original buildings in the barrio date from the middle of the last century, around the time when the USA seized the area from Mexico, so the district is very Hispanic in atmosphere.

Joy wanted to respond to the density, morphology and mix of the neighbourhood without copying the old directly. The site is long and thin, stretching 75m back almost due east from the Convent Street front to an alley. Jay restored the ruin on the street, then inserted three new houses behind it, with provision for a fourth back on the alley. The new houses have identical wedge-shaped plans and are arranged in a tight matrix of private and semi-private courts and pedestrian access ways. Joy says that the simple volumes of the houses are derived from an abstraction of the traditional long narrow



1



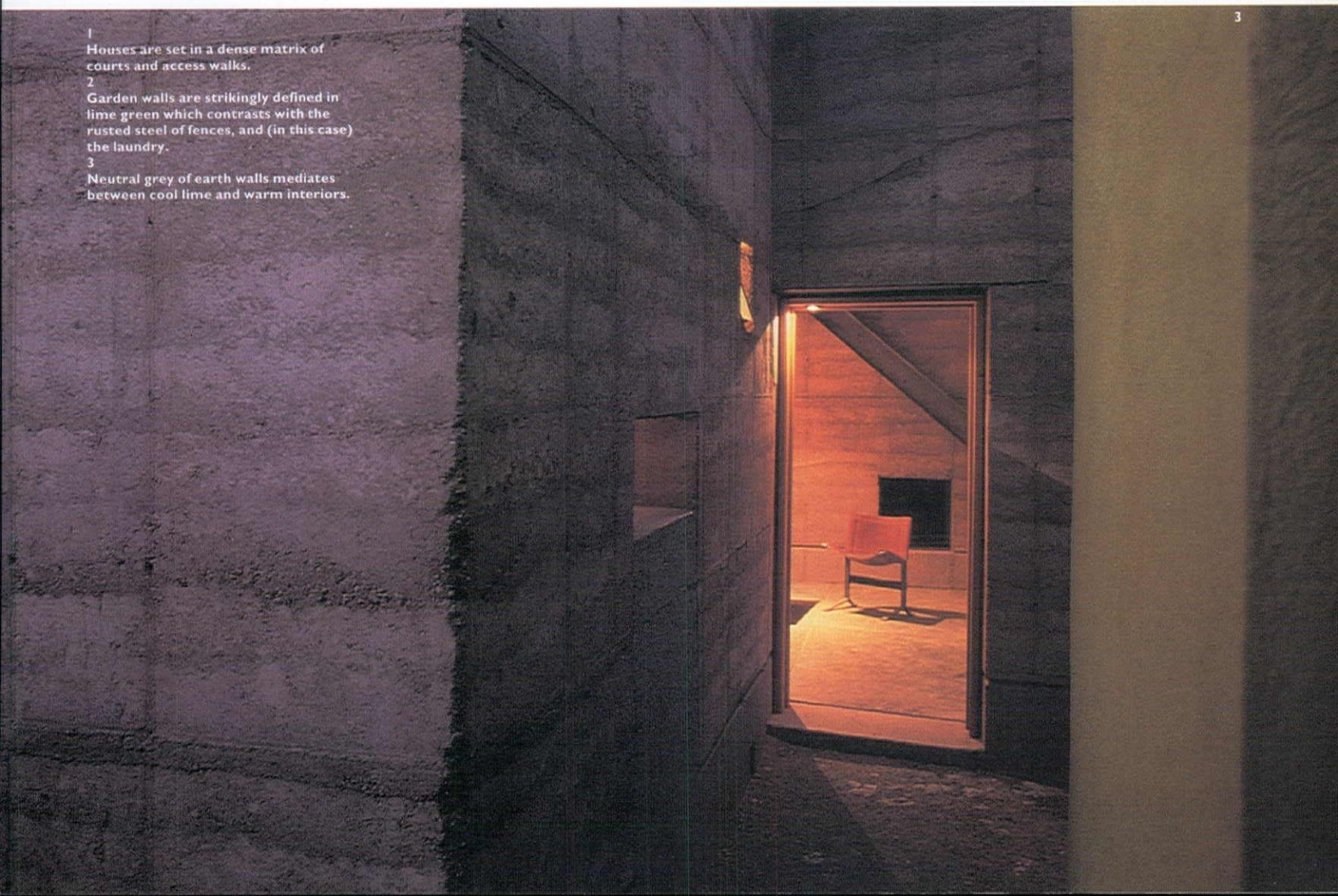
2

STUDIOS, TUCSON, ARIZONA, USA
ARCHITECT
RICK JOY ARCHITECT

TWIST OF LIME

Traditional methods and materials, intricate geometry and brilliant colour enhance Tucson's downtown.

1
Houses are set in a dense matrix of courts and access walks.
2
Garden walls are strikingly defined in lime green which contrasts with the rusted steel of fences, and (in this case) the laundry.
3
Neutral grey of earth walls mediates between cool lime and warm interiors.

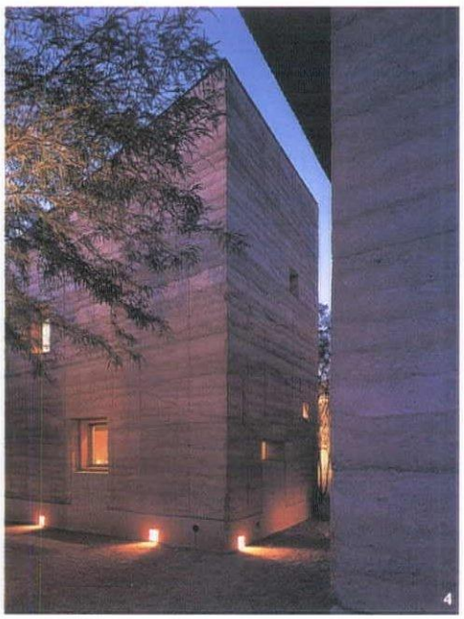


3

STUDIOS, TUCSON, ARIZONA, USA

ARCHITECT

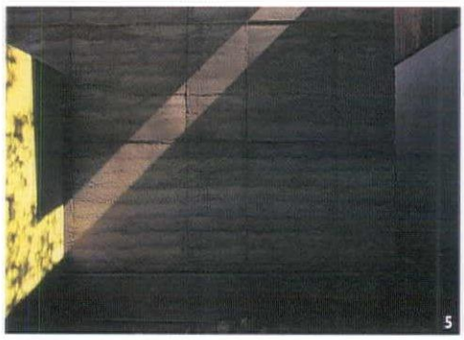
RICK JOY ARCHITECT



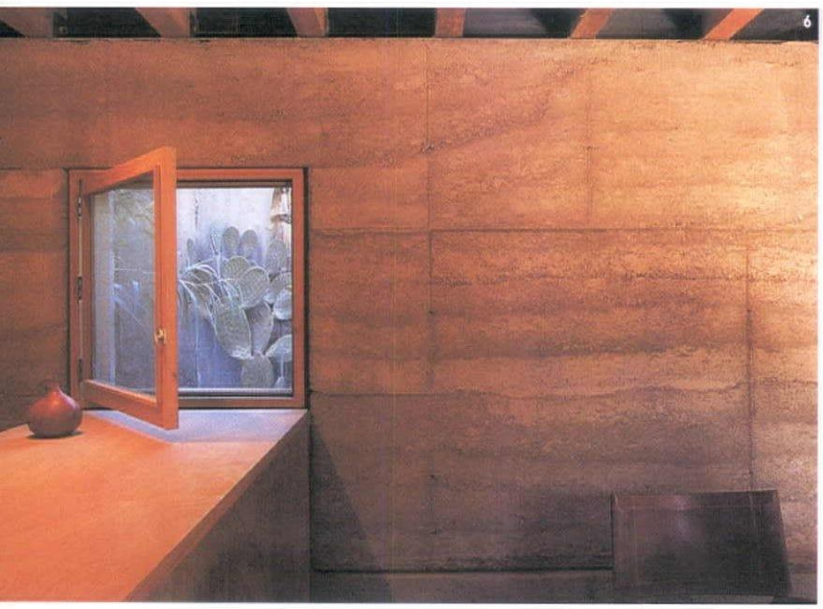
sheds of the area, tapered by putting the kitchens at the narrow ends.

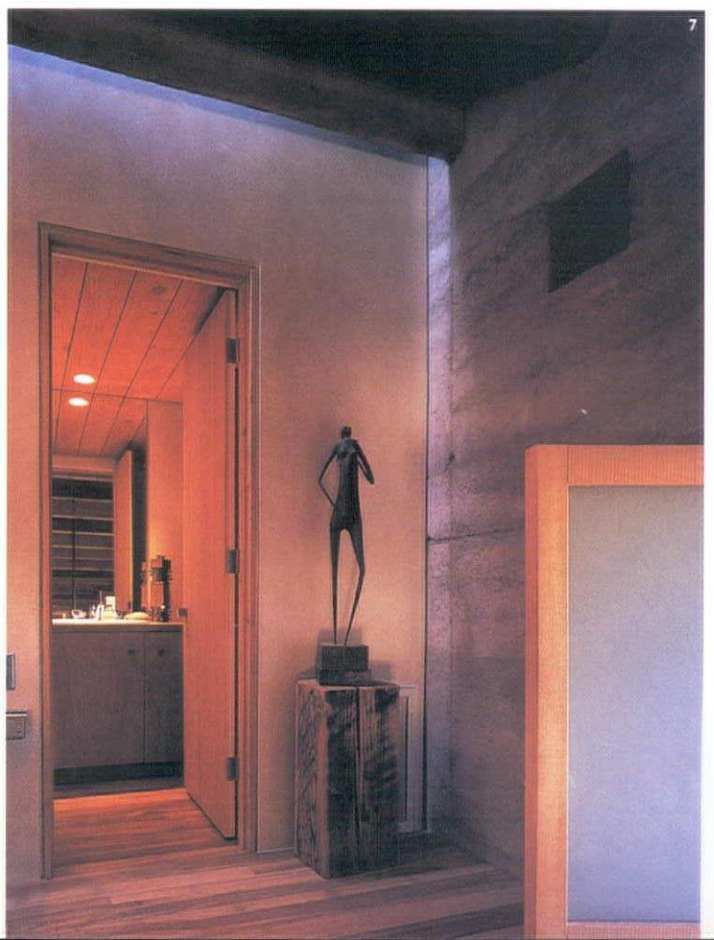
Construction is based on tradition too. Walls of the new houses are of 18in (460mm) rammed earth with some embedded structural steel components. The earth was carefully chosen from three different local sources to provide the desired consistency and colour. A small amount of red pigment and three per cent of Portland cement completed the mix, which was put into standard concrete slip forms in 10in (250mm) lifts and rammed down to 5in layers. Internal structural and floor timber is Douglas fir and cupboards are in red birch veneer: warm wood elegantly resonates with the grey/buff walls.

But the most remarkable colour effects are external. Garden walls are plastered concrete block, and garden fences are made of pre-rusted steel. Joy has coloured the walls in a particularly striking green – a sort of lime, a tint that has not been fashionable in architectural (or perhaps any other) circles since the early '60s. But here, in the hot high climate, it does not seem inappropriate. It sets off the ruddy steel and the striated earth to define and clarify the maze of external spaces, and provide numerous moments of surprise and delight within the small site. The little development would have been great anyway, but the green is a masterstroke. MARGARET SEAL



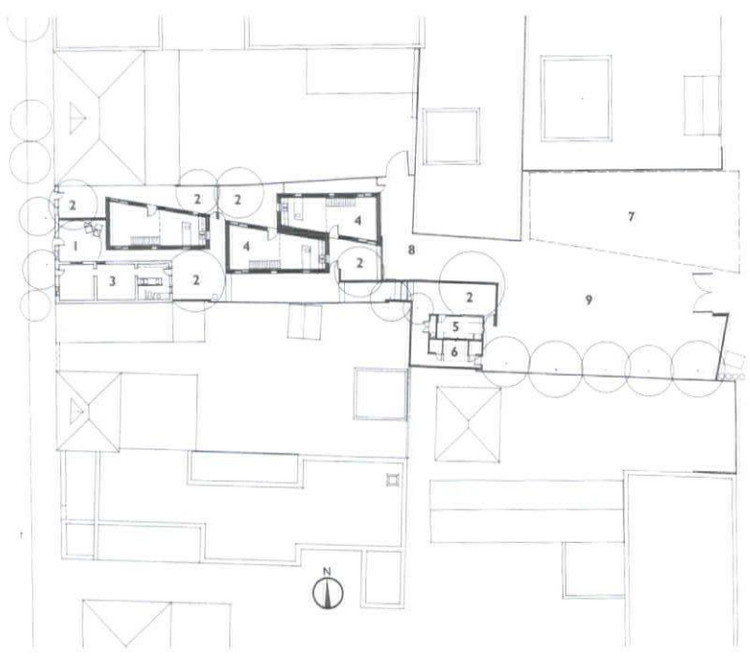
Architect
Rick Joy Architect
Project team
Rick Joy (principal), Holly Damerell (intern architect), Franz Bühler (construction supervisor)
Engineers
M. R. Behnejad, P. E. Southwest Structural Engineers Inc (structural), Roy T. Otterbein, P. E. (mechanical and plumbing)
Consultants
Rocky Brittain Architect (adobe), Deb Burnette (planting)
Builder
Rick Joy Architect (construction management)



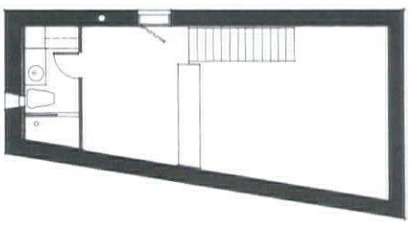


4
External lighting enriches and facilitates access.
5
Extraordinary effects of light and form achieved with minimal means.
6
Interiors are permeated by warmth of wood.
7
Bathroom off sleeping balcony: space is deepened by mirror and enriched by introduction of light slot.

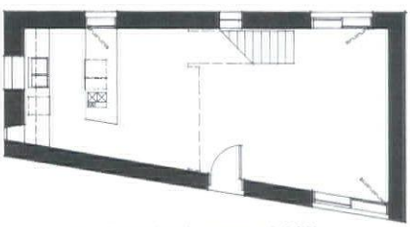
8
Light inside houses is controlled with same degree of imagination and invention as it is in courts.



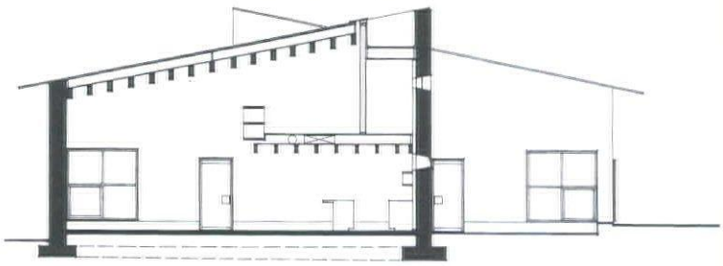
1 entrance
2 court
3 old house restored
4 new house
5 laundry
6 stores
7 proposed house
8 access for neighbour
9 parking



house upper floor



house lower floor (scale approx 1:200)



site plan (scale approx 1:800)

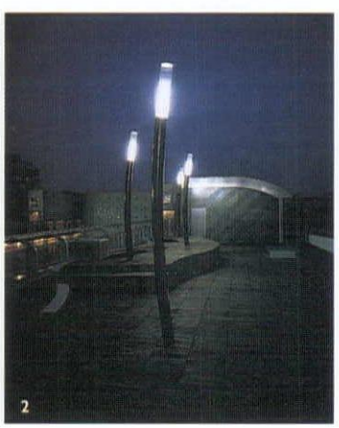
house section



SHELTERED HOUSING,
PARIS, FRANCE
ARCHITECT
ARCHITECTURE STUDIO

With its striking form and energetic use of colour, this sheltered housing scheme in the Parisian district of Belleville enlivens both the public and private realm.

PARIS PANACHE



Sheltered housing, where active, elderly people live in informally supervised accommodation with communal facilities and some degree of independence, has assumed a new importance as Europe's ageing population increases due to demographic and social change. Such dwellings tend to be conservative in form, as well as modest in spatial and economic terms, but a new sheltered housing block in Paris by Architecture Studio attempts to challenge such stereotypes and enliven both the public and private realm.

Bounded on three sides by narrow streets, the site lies in the north-eastern district of Belleville (AR August 1989), amid a dense jumble of turn-of-the-century apartment blocks. The new housing is divided into two linear four-storey blocks arranged along the long edges of the site, linked by a hub of circulation at the south-east end. The two blocks enclose and overlook a narrow strip of semi-private garden; green space is a rare commodity in this tightly-knit urban neighbourhood, so the presence of a new garden is especially welcome. At the north-west end, each block curves to a point, like a pair of sleek ocean liners nosing gently into dry dock.

The parti is exceedingly simple and economical. Apartments are arranged facing out to the street, strung along perimeter access corridors. The long corridors face inwards, overlooking the garden, and their potential monotony is dispelled by the energetic treatment of the inner wall plane. The wall enclosing the flats meanders like a snake and the doorway to each flat is extruded slightly to create a series of cuboid forms projecting from the curved surface. Each

1
A pair of curved glazed wings extend to embrace the neighbourhood.
2
Roof terrace, with sculptural, stalk-like lighting.
3
The two wings enclose a small garden, bringing a new green lung to the city.
4
Colour is used to animate the garden elevations.

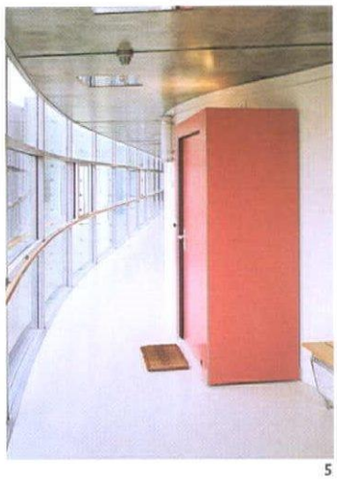




SHELTERED HOUSING, PARIS, FRANCE

ARCHITECT

ARCHITECTURE STUDIO



5

Coloured doorways extrude from the curved wall plane, enlivening the long access corridors.

6

Enclosed by a shimmering skin of glass, the garden elevations are like giant fish tanks.

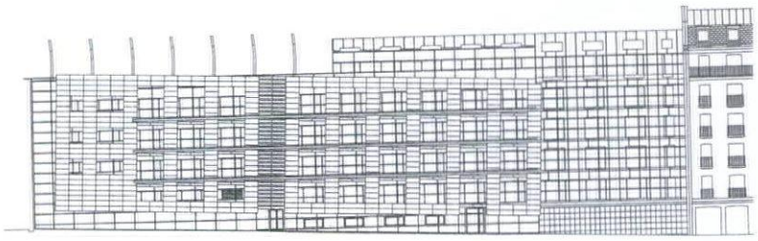
doorway is painted a different colour (the kaleidoscopic palette includes bold red, moss green, salmon pink and intense blue), further enriching the overall composition and clearly distinguishing individual flats. Corridors are enclosed on the garden side by a glass skin, so that the garden elevations are transformed into huge fish tanks, animated by the bursts of colour and the daily comings and goings of residents. The use of colour also extends to the reptilian green copper cladding of the circulation hub that links the two blocks. By contrast, the street facades are more massive and solid, taking the form of contextual exercises in crisply detailed masonry.

The building contains 83 flats, based on a studio apartment model, along with a slightly larger supervisor's flat. Each has a small kitchen, bathroom and a bedroom-cum-studio. The flats follow a conventional cellular arrangement, with the kitchen and bathroom forming a buffer zone against the access corridor. Set in the prow of each block on the ground floor are large communal rooms for social activities. Parking is provided in the basement and there is also a roof terrace, with sculptural timber benches and external lights on tall, curved stalks. Despite the economy of means, the building is both elegant and jolly; it provides dignified accommodation for its elderly residents and invigorates the neighbourhood with its spirit and panache. PAUL JOUBERT

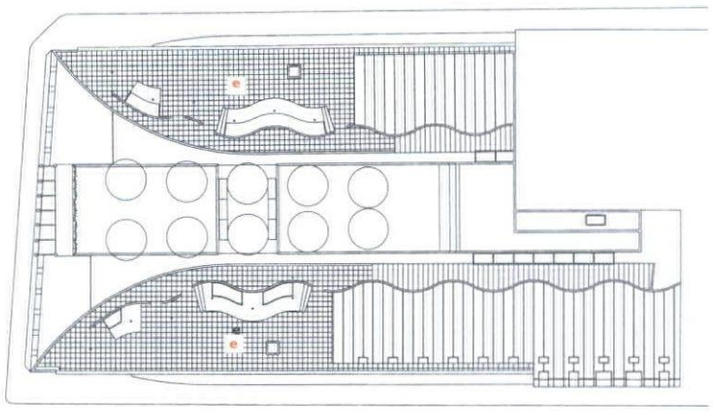
Architect
Architecture Studio, Paris
Project team
Martin Robain, Rodo Tisnado, Jean-François Bonne, Alain Bretagnolle, René-Henri Arnaud, Laurent-Marc Fischer
Photographs
Jean-Marie Monthiers



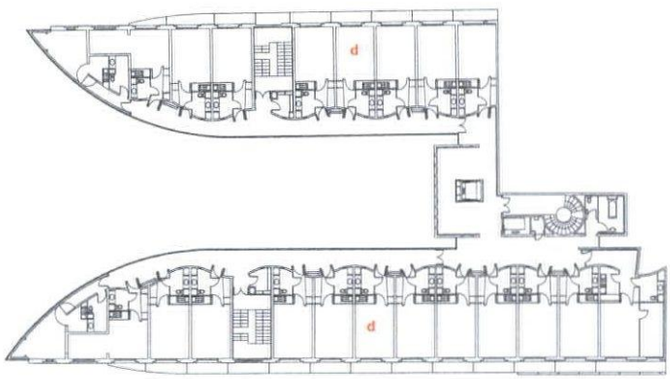
6



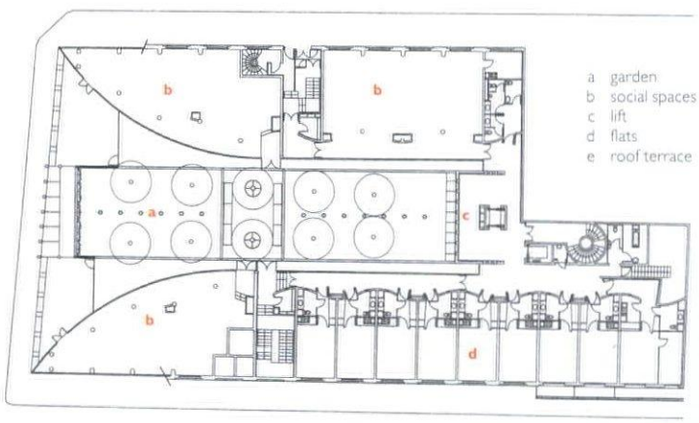
south-west (street) elevation



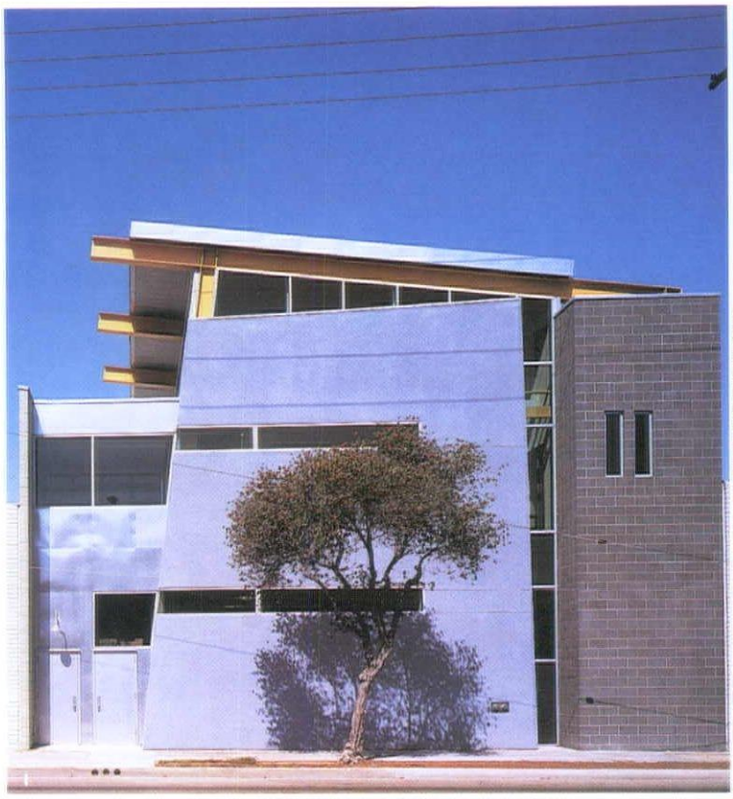
roof plan

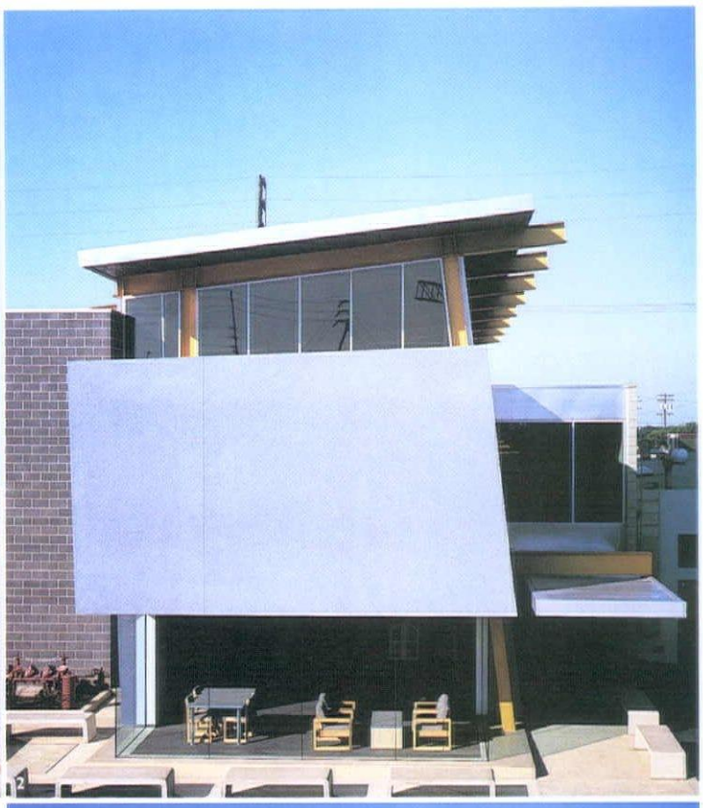


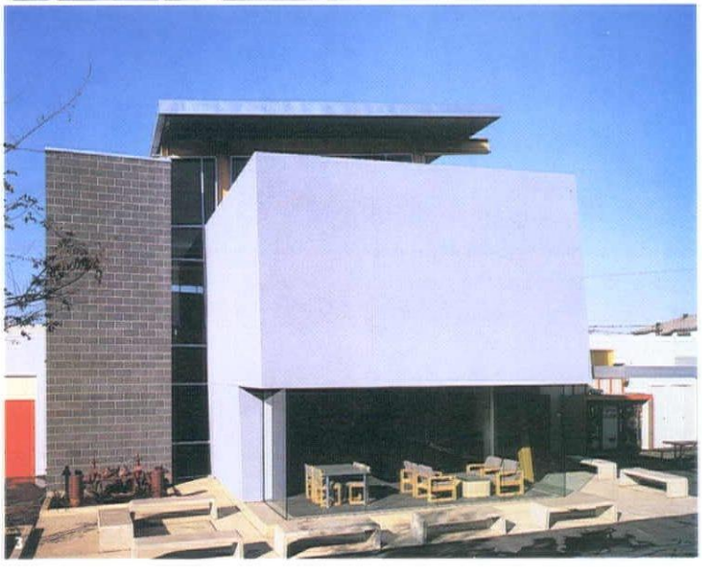
typical floor plan



ground floor plan







SCHOOL LIBRARY, SANTA MONICA, CALIFORNIA, USA
ARCHITECT
STEVEN EHRLICH ARCHITECTS

CROSSROADS

A school on a tough site in Santa Monica has received a building which offers a sense of place and hope, partly by the courageous use of colour.

1
West end on public street is a non-committal mask with escape doors only, but ...
2,3
... east end on school's main open space is welcoming and transparent. Library roof dominates lower wings on each side.

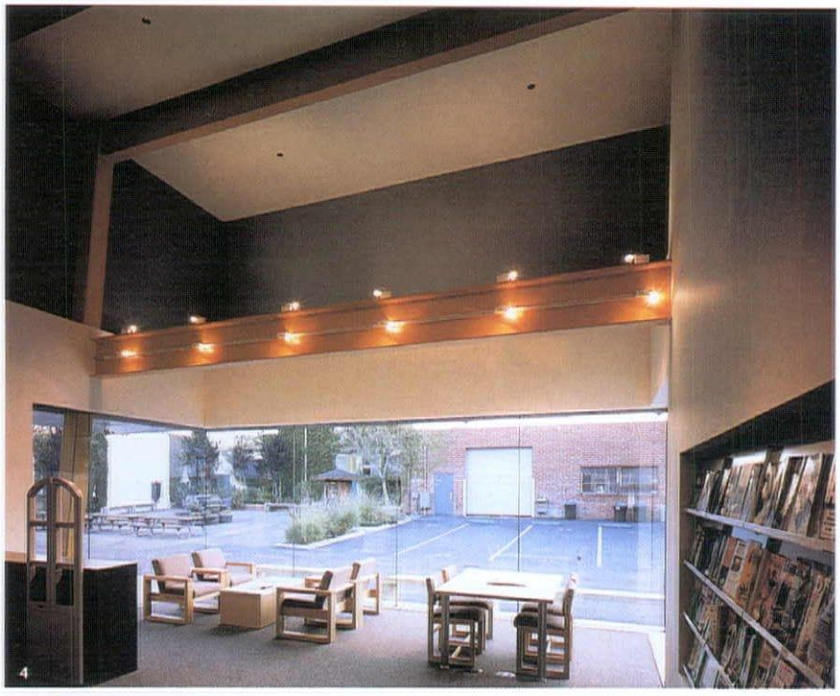
Crossroads School in Santa Monica may not be the best endowed or appointed educational establishment in the world, but it's got guts. The site of the middle and secondary school focuses on an alley which is lined on each side with a mixture of commonplace storage and industrial buildings that have been converted piecemeal to school uses. The alley is private, but in most other respects, it is just like any other in the area, even to the extent of having to accommodate car parking. Yet it acts as the school's open-air social forum: it's the 'campus quad'.

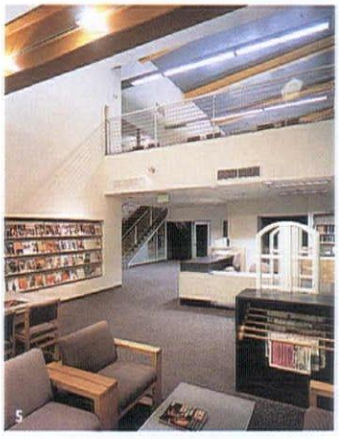
Now, the quad has at last acquired a good new building. Steven Ehrlich's Paul Cummins Library is both a landmark and a measure of quality for the whole place. Crammed tight against its neighbours, and with a long thin plan stretching east-west like theirs, the library had to conform to many of the constraints of the campus. But it pushes out a generous porch into the quad. A canopy is flanked by a student sitting area which is enclosed by a frameless glass wall: a surprisingly sophisticated constructional device in the circumstances, and one that makes the area and the reception desk behind it both prominent and welcoming. Over the smooth glass hovers an irregular box painted a striking

SCHOOL LIBRARY, SANTA MONICA, CALIFORNIA, USA

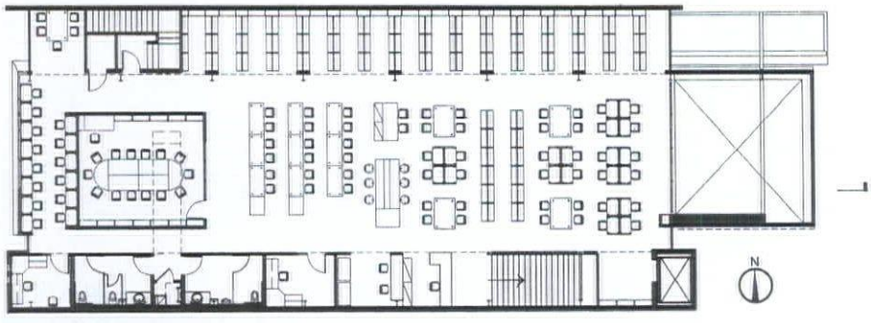
ARCHITECT

STEVEN EHRLICH ARCHITECTS

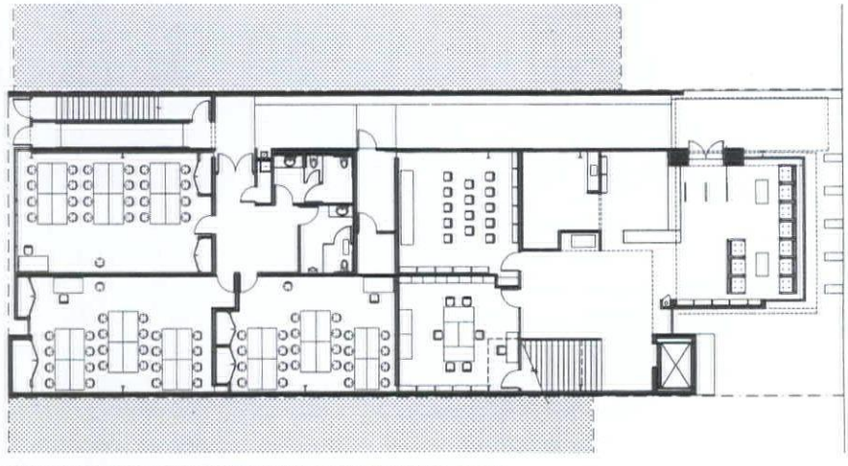




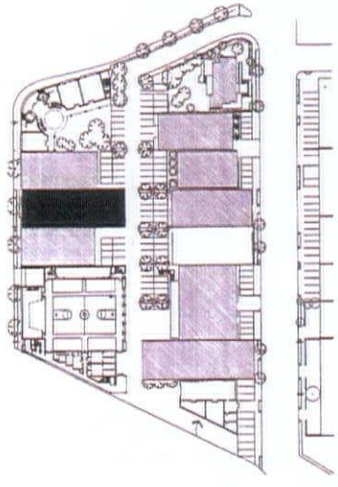
4
Entrance looks out onto 'quad', in fact an alley lined with industrial buildings converted to school uses.
5
Library reception with balcony of library over.
6
Library is flooded by light from clerestory ...
7
... and given scale by exposed yellow steel frame. (Looking west towards internal meeting room.)
8
Stacks are in north aisle beyond canted steel legs.



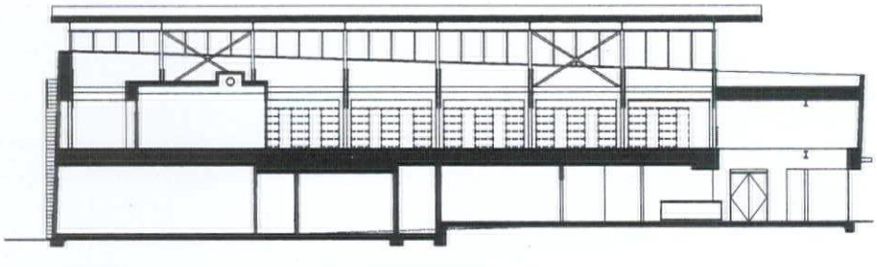
first floor (scale approx 1:250)



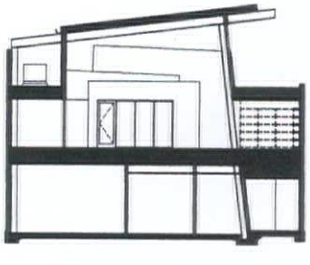
ground floor seating at entrance different in practice – see 4



site plan



long section



cross section





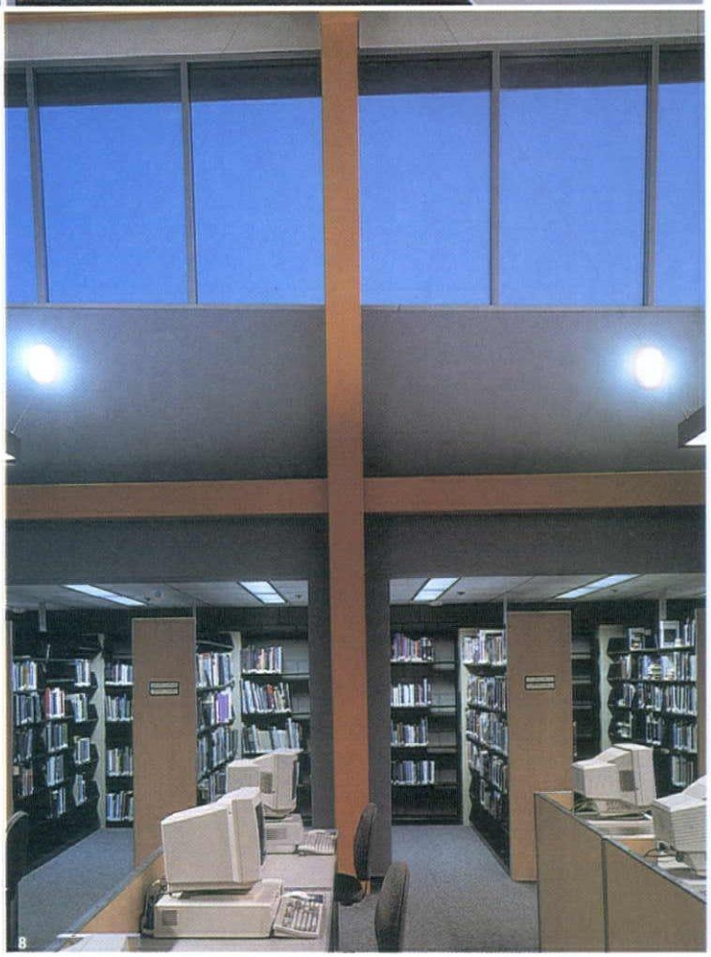
shade of blue – or rather perhaps pale indigo: a daring move in the area, but one that certainly attracts attention without being strident. Above and behind the box hovers the main roof plane, propped on a striking yellow steel frame and jauntily sloping up sideways to allow a north-facing clerestory to run along the whole length of the building. The roof is made the more jaunty because it slopes gently from west to east as well, an inflection much more readily perceived from inside. It is unlikely to occur to either architect or users, but to a British observer of a certain age, the plane seems to be a little like an abstracted post-modern academic mortarboard worn at a cheerful angle in the sunshine.

Inside, the big library volume beckons from a wide balcony that opens over the reception area. The rest of the ground floor is given over to mysterious troglodytic class and seminar rooms, three of which serve the adjacent mathematics centre. (The tight-packed site plan makes daylight on ground floors a problem throughout the campus.) Upstairs, the main space of the library is full of light from the clerestory (which turns at each end).

The tall volume is articulated by the strong rhythm of the straddling yellow steel frame which is completely exposed. Props on the north side are inclined, following the plane of the clerestory, making the room more cheerful and tent-like than it would have been if they had been vertical, echoing the ones to the south. Beyond the north props is a strip of stacks, and a similar lower aisle containing staff rooms and lavatories runs along the south side.

Construction is almost completely industrial, the contemporary Californian vernacular: simple steel structure, blockwork, external grade plaster and so on. But the feeling of the place is far from being utilitarian. It is celebratory and happy, an atmosphere generated by geometry, occasional use of fine detailing (the frameless glass at the entrance for instance) – and, of course, by the deft colours.

PETER DUNNE



HOUSE, ERLENBACH, SWITZERLAND
ARCHITECT
PETER MÄRKLI



site plan

IN THE PINK

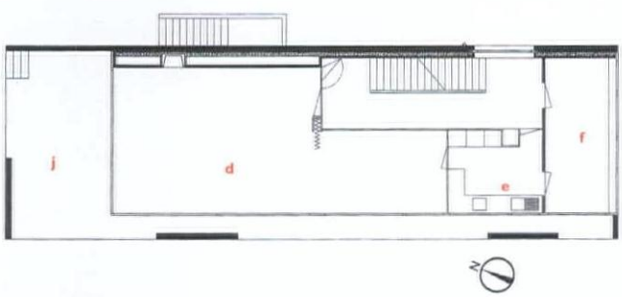
Distinguished by its exotic pink colouring, this modern family house in Erlenbach is instilled with a formal and material rigour that challenges suburban conventions.

Drawing on Classical tradition of a building elevated on a plinth, as in his own museum at La Congiunta (AR February 1998), Peter Märkli's recent Hürzeler house in Erlenbach cannot be simply relegated to fashionable minimalism. Rather, its subtleties and exactitude challenge us to look more carefully, for things here are not what they seem.

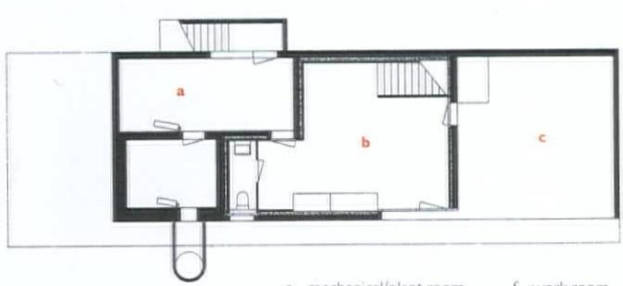
The scheme's strong horizontality, which follows from Märkli's succinct taxonomy and the proportions of the site, is reiterated in a number of ways. The irregular spacing of the pink concrete panels on the main street elevation, for instance, defines parallel bands, with the lower elevation more animated than the upper one to reflect the house's zoning. The panels' proportion in relation to the voids leaves them ambiguously neither wall nor column, while colouring them pink challenges their structural and material integrity. Floor and roof slabs are identically thick (though structurally they need not be), while the vertical ones are made thinner. The staircase and corridor are placed to emphasize the long axis. On the short north-western side, the house's horizontality extends into cantilevered terraces and a lawn



first floor plan

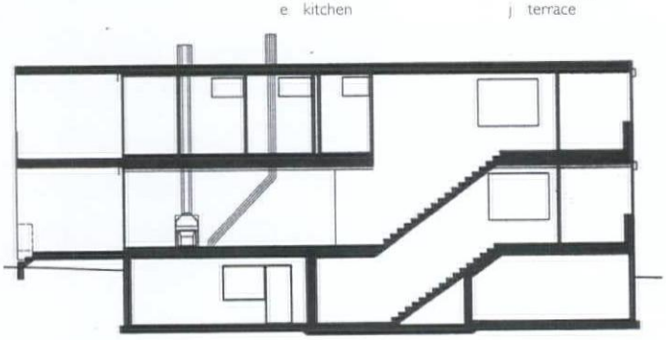


ground floor plan (scale approx 1:400)

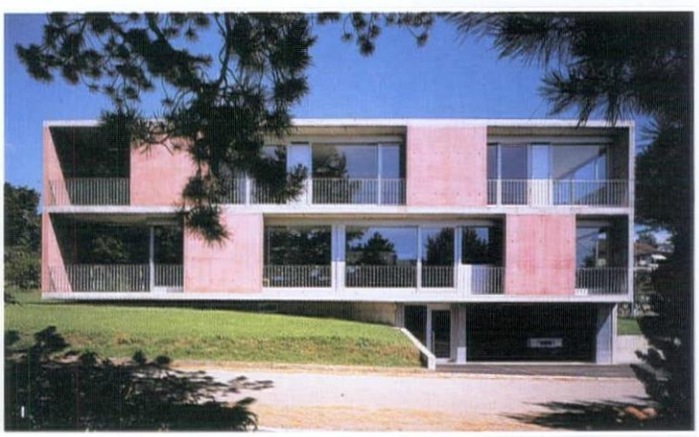


lower ground floor plan

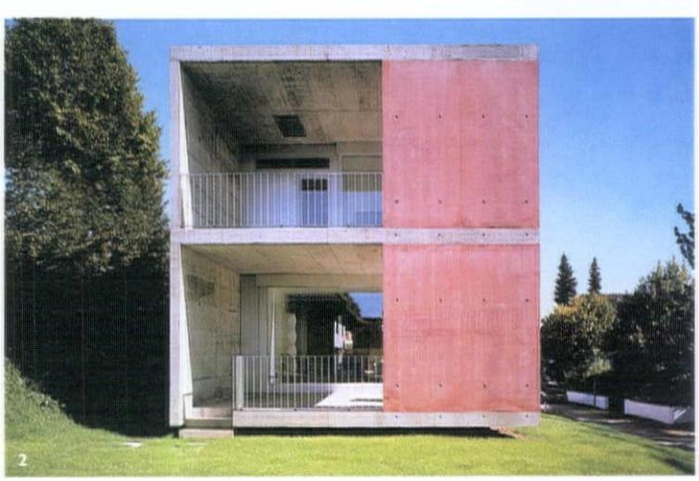
a mechanical/plant room
b entrance
c garage
d living
e kitchen
f work room
g laundry room
h bedroom
i bathroom
j terrace



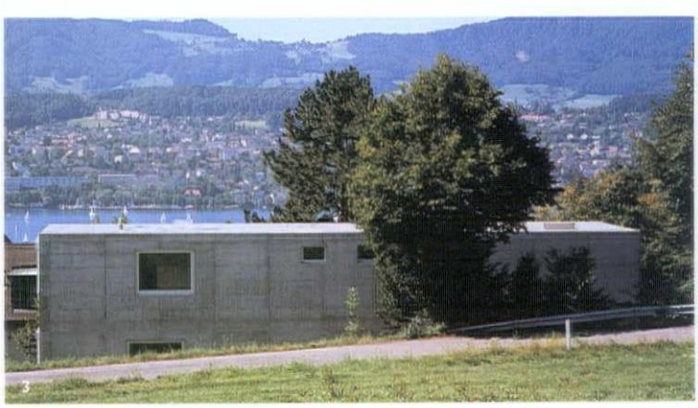
longitudinal section



1



2



3

which affords glimpses of the lake below. On the other short side, windows are flush with the outside wall to refute its weight but also mark a boundary.

Challenged with balancing privacy with the client's desire for 'a lot of glass', Märkli rejected the suburban devices of marking semi-public space, such as walls, gates, and lawns. The tarmac of the street flows directly to the front door, and the garage is secured by a simple open mesh screen. Inside, the floor changes to coloured concrete in the basement anteroom with linoleum on the floors above. The plinth, pink planes and railings define an edge, and the gap between it and the glazed walls unobtrusively and effectively ensures actual and psychological privacy. The interior is free of structure and feels delightfully spacious and light.

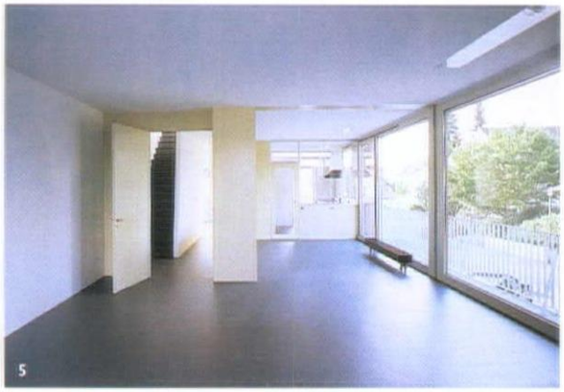
The reduction of tectonic expression allows Märkli to concentrate on fundamentals like proportion, and to make precise and sometimes clever moves. The laundry room is sensibly upstairs by the bedrooms rather than, as is normal, in the basement, and it thereby gives the upstairs terrace a less formal character than the one off the living room. The kitchen is separated from the dining area by glazing and built-in furniture to allow it to be part of the room visually but not physically. The bathroom is not on the same floor as the kitchen and living room but below in order to separate theses functions appropriately. Each of the upstairs rooms has practical built-in furniture and a bit of the pink planes for privacy. The rear elevation appears to bulge convexly (by setting two windows above one another in different depths), as if the horizontal slabs were pushing against it.

The architectural language is reduced but not abstract. Doorways have frames, for example, and all components are off-the-shelf. The quality of construction is impeccable, and transitions between materials and elements are truly flush.

The conspicuous use of concrete responds to other demands, rather than being an essay in itself. Its versatility, however, does allow Märkli to unify what is a composite construction with embedded beams, prestressing, and insulation above and below the slabs so that they are thin enough to achieve the necessary visual and structural effect.

STEVEN SPIER



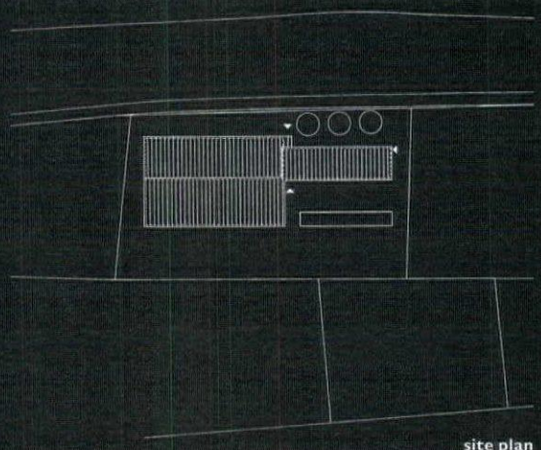




1
The striking pink concrete house is elevated on a plinth.
2, 4
On the north-western side, cantilevered terraces extend out to enlarge the living and bedroom spaces.
3
Minimally articulated rear elevation. Here the concrete remains unpainted.
5, 6
Luminous living and kitchen spaces.

Architect
Peter Märkli, Zurich
Photographs
Gaston Wicky





site plan

KINDERGARTEN, LUSTENAU, AUSTRIA
ARCHITECT
BURKHALTER & SUMI

RED SHIFT

Burkhalter & Sumi's modest kindergarten in an Austrian suburb explores the relationship between whole and part through simple massing and the use of colour.

In its bland Austrian suburban context Burkhalter & Sumi's red kindergarten, as it is locally known, becomes a landmark merely through its colour and size. The apparently simple massing and the choice of a bold red close to that of a long-popular line of wooden toys evokes winsome memories of children's building blocks. But it quickly and naggingly insists on oscillating between being a whole and a composition of parts, asserting perceptual and formal ambiguities and a complexity characteristic of Burkhalter & Sumi's work (AR January 1997).

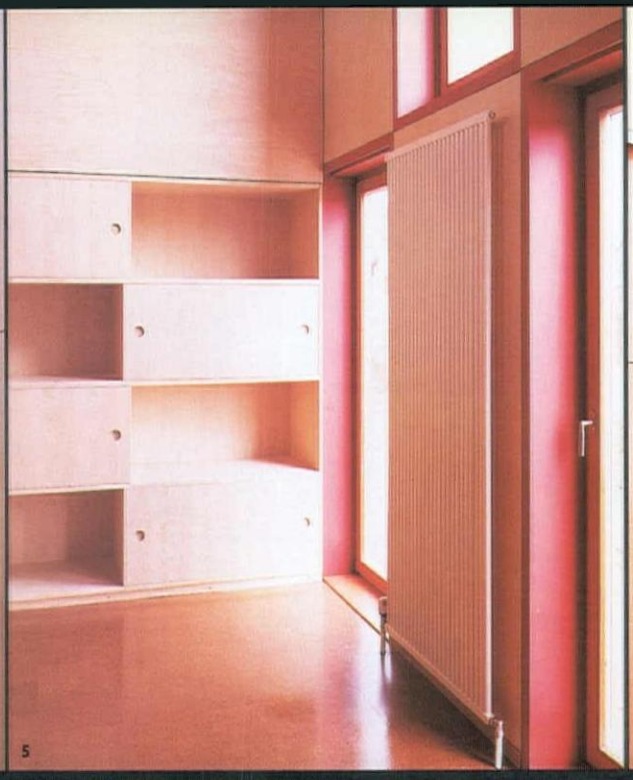
At the ground floor the entrance splits the building in two, with the kindergarten to one side and an infant care station with three small flats above to the other. Z-shaped circulation divides the kindergarten along its long axis and reflects a more complex composition, with the tension between whole and part reinforced through fenestration and the use of colour. At upper level, the identical tall volumes housing flats and playrooms touch at only a single point (though in the continuous figure of a Möbius strip), and are then separated perceptually. A lower, one-storey mass sits next to the entrance. This is tied to the block behind it in plan and by the orientation of its windows, and also to the mass beside it by colour and location.

Burkhalter & Sumi limit themselves to one size of window, but this is used both vertically like traditional french windows and horizontally like a Modernist ribbon. By setting the windows flush to the exterior cladding they avoid what they describe as the violence of cutting a hole in a wooden skin. The subsequent lack of shadow strengthens the integrity of the masses and helps make the elevations powerfully graphic and even playful. While not the simplest to detail, this building is another in a series that draws on the architects' research into contemporary timber construction. The number and proximity of the windows on the exterior wall of the playrooms, for example, denies typical wood construction and reduces the wall to a plane balanced between transparent and opaque.

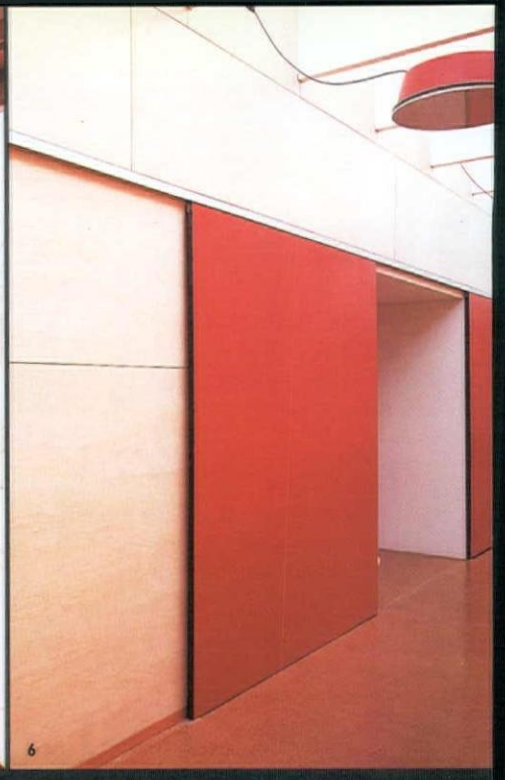
The ground floor of the kindergarten is divided by a spacious, skylit corridor animated by a rhythm of ceiling joists. To the south are three double-height playrooms with balconies, and cloakrooms



4



5

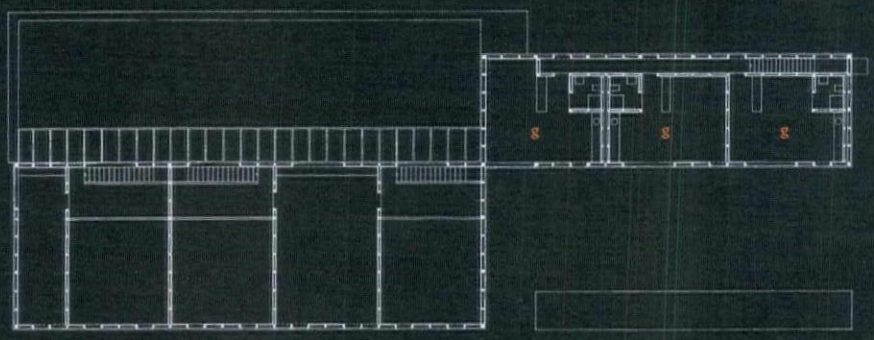


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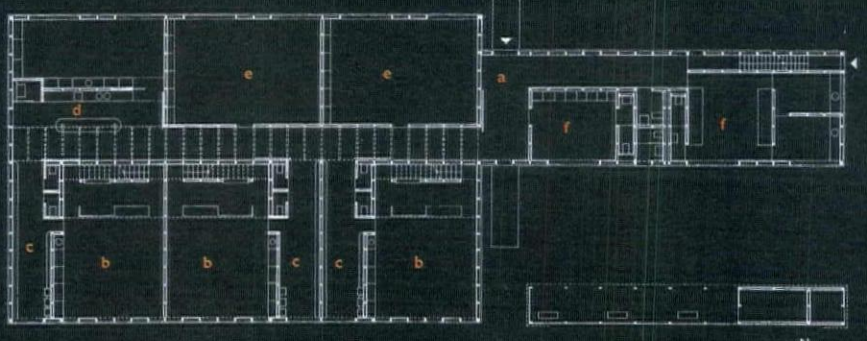
KINDERGARTEN, LUSTENAU, AUSTRIA

ARCHITECT

BURKHALTER & SUMI



first floor plan



a entrance
b playrooms
c cloakrooms
d kitchen
e exercise and nap rooms
f infant care
g flats

ground floor plan (scale approx 1:450)

elongated to lead directly outside. To the north of the corridor are two exercise and nap rooms. Interiors are warm and calm, with walls clad in large birch plywood sheets and floors cork. In contrast to these natural finishes, the red is brought inside as another layer on sliding doors, lamps, columns, and window frames to delightful and surprisingly gentle effect. Colour is used to unite disparate formal, material, functional elements and confirms the architects' work as rigorous without being pedantic.

proportion is especially apparent in the playground. The space is enclosed by two walls of the same height which meet at right angles and are wrapped in white for a vaguely public feel. The siting of the pergola catches the edges of the masses while letting the axis of the entrance slip by, thus gently defining another volume. The pergola functions as a summary of the building, condensing the themes of massing, colour, verticality and horizontality. It also draws

entrance. The passage from the entrance transforms the pergola into a kind of primitive hut, mediating between the raw material of the trees and the sophistication of the building's timber construction.

STEVEN SPIER

Architects
Burkhalter & Sumi, Zurich
Project team
Andrea Bassi
Structural engineer
Ingo Gehrer, Höchst
Landscape architect

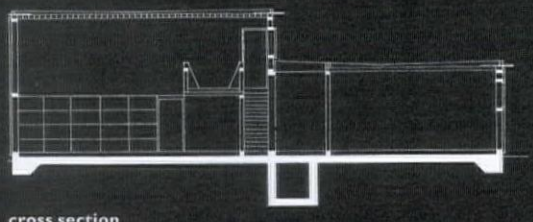
4
Animated by the rhythm of ceiling joists, a skylit corridor separates the two parts of the ground floor.
5
One of the double-height playrooms.
6
The red of the exterior is also brought indoors, on sliding doors, lamps and columns.



2

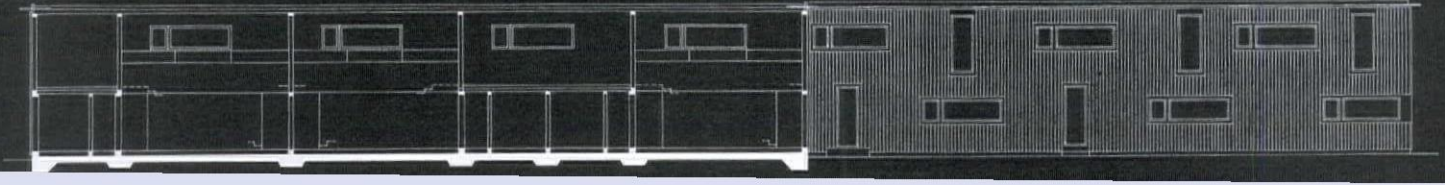


3



cross section

1
With its bold red timber cladding, the compact kindergarten is a surprising presence in the suburban landscape.
2
The simple elevations have a powerful, graphic quality.
3
The same window type is used both vertically and horizontally.



Aga Khan Awards 1998

Out of the plethora of architectural awards offered in the world today, those of the Aga Khan[1] have the most explicit social dimension. As this cycle's Master Jury[2] explained in its report it 'searched for projects which respond creatively to the [crises of] the world in general today, and in the Muslim world in particular: demographic pressure, environmental degradation, globalization, standardization, ethnic tensions, the crisis of the nation-state, the struggle for democracy and human rights ... This search was related to community rebuilding ... and to the development of vital modern vernacular styles'. Presumably by this, jury members mean that they have looked for[3] sustainable and replicable models which have lessons for us all. They have certainly done so in premiating the reinvigoration of Indore (p62) and the renaissance of the old town of Hebron (p64); the jury explained that 'both share the idea of reclaiming community space from growing social, physical and environmental degradation'. Particularly in the case of Indore, the most sophisticated modern technology like satellite surveying was combined with age-old methods whereby the inhabitants of the slums literally dug themselves out of squalor. At Hebron 'the project was initiated and managed by a community under siege'.

Equally moving is the leper's hospital at Chopda in India (p66) where the simplest techniques and local materials (some of them waste) were brought together by two young architects to make a building which remains unfinished because it was so urgently needed and it was occupied as soon as the first part was habitable. All three of these projects show how architects and other designers (the person responsible for the Indore project was a civil engineer) provided they have enough modesty, imagination and drive, can use their skills to help the poorest people in the world.

Other premiated schemes in this round of awards are different in character. Jimmy Lim's house in Malaysia (p71) is one of the most obviously ecologically aware of the projects, adapting ancient building techniques (even going as far as refusing to use metal fixings in the timber structure). Yet it is clearly far from cheap, and it is difficult to use as a model for extensive development, though its climate control principles may perhaps have wide application.

The other three award-winning buldings are in different ways attempts to create modern Islamic monuments. The jury commented that they are 'very significant in the process of evolving a contemporary architectural vocabulary within the Islamic world'. Creating a monument in a Muslim culture is no easier than it is elsewhere, and each architect has adopted a different strategy. The Lahore arts centre (p70) is the most conventional: a cluster of modern object buildings is grouped to provide a court which the assessor has found to be a popular addition to the public spaces of the city. While claims that the brick cladding of the Lahore buildings reflects the red sandstone of the old city seem a bit far-fetched, the materials and forms of the Saudi Arabian government hospitality centre (p68) are obviously derived from desert citadels and tents, united in a surprisingly coherent solution that grew out of an unlikely marriage between two quite different teams of designers. Though the place is fundamentally exclusive, the assessor reports that Riyadh citizens use its oasis and terraces in evenings and at holiday times, so it is to some extent a public amenity.

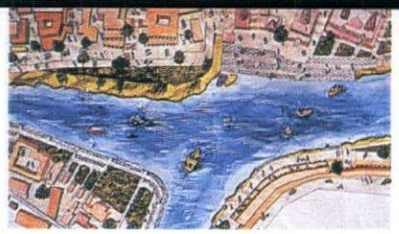
Charles Correa's parliament building in Bhopal (p65) is perhaps the most successful of these monumental buildings. On its height above the city, it has to make a figure, and be a symbol of the state's democracy. And, at the same time, it has to offer an interlocked hierarchy of spaces for the public, their legislators and civil servants. By understanding traditional urban spaces and reinterpreting them, Correa has created a building which resonates with the past but does not copy it.

In one way or another, all the award winners reflect on tradition without being slavish. As the jury pointed out, the countries of the Islamic world 'are developing new lifestyles, cultural values, symbols and aspirations' and the Award Programme is in an ideal position to generate debate on 'architecture that reflects these new realities'. P. D.

1 The awards have been given every three years since 1980. Total prize money is US$ 500 000, which is divided up not only between the architects, but depending on the project, between the people who were responsible for the work, from clients to craftsmen.

2 Members of this jury were Mohammed Arkoun, French/Algerian philosopher; Zaha Hadid; Saleh Al-Hathloul, Saudi Arabian architectural critic and educator; Arif Hasan, Pakistani architect; Arata Isozaki; Fredric Jameson, American cultural theorist; Romi Khosla, Indian architect; Yuswadi Saliya, Indonesian architect; Dogan Tekeli, Turkish architect.

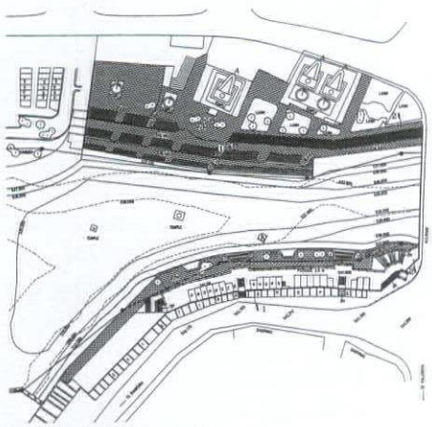
3 Out of 424 projects presented to this year's jury, 24 were selected for review in-situ by assessors to find out how they have performed in practice (usually, a project has to have been in use for at least three years before it is considered; the Aga's awards are the only ones that include this dimension). The seven premiated works were chosen after the jury reconvened to discuss the 24 on the short list. The number of prizewinners was unusually small but the jury was 'concerned not to duplicate messages conveyed through selections by earlier juries'. A curious decision, as good lessons need repeating.



URBAN REVITALIZATION, INDORE, MADHYA PRADESH, INDIA
CONSULTANT
HIMANSHU PARIKH

INDORE

Masterly command of traditional and high technology has enabled a remarkable urban revitalization which has greatly improved city life.



treatment of town centre



Indore: slums shown as dots, main sewers heavy lines

1
At the confluence of the two rivers, the temples and their surroundings have been restored.
2
One of the main strategies was to realign and reduce the level of the streets so that they could act as storm water run-offs.
3
Fountains help to aerate the water and make it more wholesome.
4,5
The old centre has come to life again.
6
Concealed main sewers follow the fall of the valleys, allowing the rivers to become clean and pleasant.
7
Rationalization of drainage and house production has led to a lively variety of dwelling types.

Indore is a thriving city on the western side of the Malawa (Deccan) plateau. The capital of Madhya Pradesh, it was founded at the confluence of the Khan and the Saraswati rivers and remnants of Hindu temples and palaces still exist in the centre. But in the last three decades, the city's prosperity has attracted many country dwellers who have set up large slum communities, scraggily built and with no source of water other than the rivers which also had to serve as sewers.

With amazing vision, persistence and political nous, Himanshu Parikh, a Cambridge educated civil engineer, has related 183 of the slums in a network of roads, sewers and water services which allows the inhabitants to achieve a level of decent existence that enables them to be true citizens. Because the slums were largely along the river side, Parikh was clear that the chief element of the strategy had to be provision of enclosed main sewers down river banks. These prevent river pollution and accept quite short drainage runs from groups of houses: each house has a gulley-trap, water flushing latrine for removal of drainage and waste. Road falls and levels within the slums were lowered so that they can throw storm water into the rivers rather than allowing it to flood the houses.

Parikh used a combination of high technology and local resources to order the inchoate masses of the slums. Satellite surveying found the best natural gradients for drainage flow. A CAD program established the best relationship of individual houses to the main sewer. A system was devised for optimizing house foundations, lavatory and water system management. Treated sewage water is now recirculated to the rivers, where with fountains and other aerating devices, it forms a pleasure lake; the old monuments have been restored as part of a park which attracts locals and tourists alike. Local skills and materials have been used: brick walls, stone floors and so on built by householders and small contractors. Slum dwellers pay for their own water and sewage connections and, by free labour, for some of the infrastructure, the main costs of which have been borne by the Municipal Corporation.

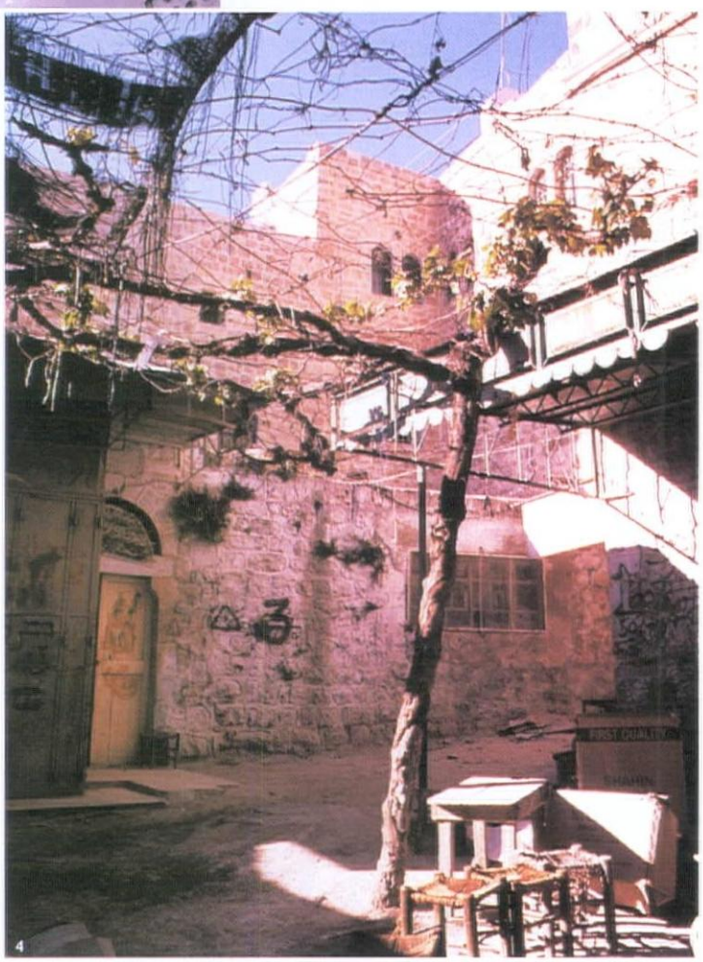
As families acquire more resources, they elaborate their houses, adding rooms and embellishing the fronts. Whole neighbourhoods are gradually improving themselves. Crime has gone down, health and amenity in the entire city have improved. The system will be extended to embrace more than the 28 per cent of the slum population (900 000 people) that it already serves.

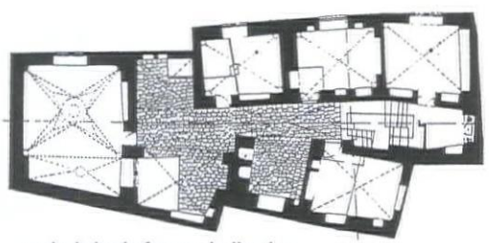
Consultant
Himanshu Parikh



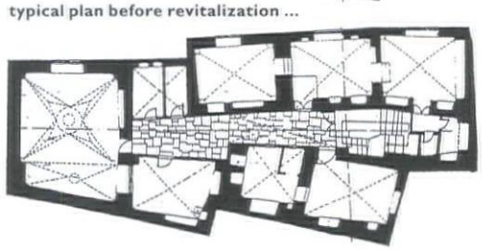








typical plan before revitalization ...



... and after

CONSERVATION OF HEBRON OLD TOWN, PALESTINE
DESIGNER
ENGINEERING OFFICE OF THE HRC

HEBRON

The decaying masonry maze of Hebron's old town has been revitalized with great energy and ingenuity.

Hebron is important to Muslims, Jews and Christians. The highest city in Palestine, it is the traditional resting place of the prophet Abraham. Canaanite, Roman, Byzantine, Mamluk, Ottoman, British, Israeli and (now) Palestinian regimes have all left their mark on the place (often by destroying the work of their predecessors). But a fine old city remains surrounding the Haram of Abraham. It has suffered much, both by the departure of the original owners to the new town, and by Israeli policy after 1967 which discouraged people from living there. Palestinian political pressure and population growth in the new town (which cannot expand much more) necessitated re-awakening the old quarter.

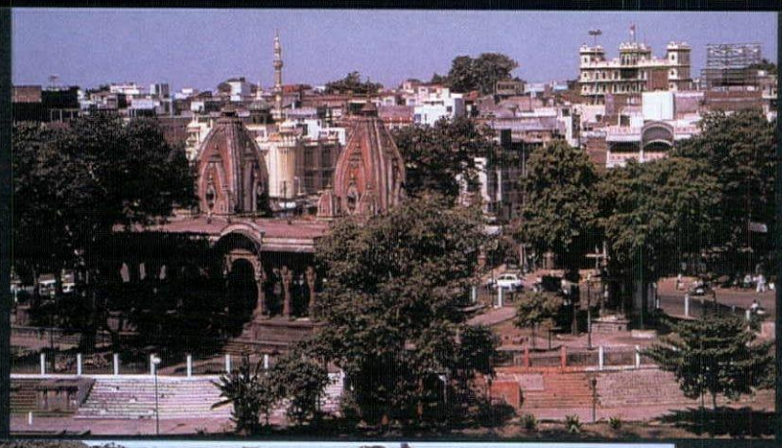
It is largely built of stone, with vaulted or domed internal spaces on massive walls. Traditionally, houses grew organically, with rooms being added as sons married and set up their own families. Dense masonry clusters resulted: some rooms had no windows, some were almost inaccessible. Semi-open spaces in the middle of clusters were reached by pends. There was usually no water and sanitation, and no fireplace or stove for traditionally food was prepared in the Abraham Mosque and distributed throughout the town.

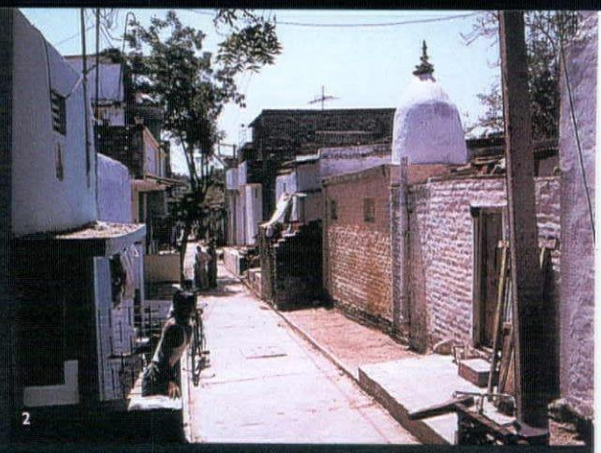
The Hebron Rehabilitation Committee (HRC) initiated detailed studies of the ravelled geometry and ownership patterns. A programme was initiated for creating modern dwellings (usually two room apartments) in the old fabric; new access and stairs were provided where necessary. Electricity was laid on and water-borne services installed, usually in the semi-open spaces. Small kitchens were created for each unit. Shops were regenerated as part of the programme. Traditional masonry building techniques were used for new work, and existing concrete block patching was faced with stone. The HRC sorted out incredibly complicated ownership patterns and organized the funding which has come entirely from public and international sources. As part of the programme, the Abraham Mosque is being restored, and the old Turkish Baths have been turned into a museum.

When the technical assessor inspected the place last year, well over 100 apartments had been created, with about 300 more being worked on or in the pipeline. He reported a high degree of satisfaction with individual homes, and a sense of community in the whole complex. Sadly, plans for rehabilitating the infrastructure of the whole area – main sewers, roads and so on – have ground to a halt because of disagreements between the Israeli Government and the Palestinian Authority.

Designer
Engineering Office of the HRC
Project leader
Khalid al-Quwasme
Project team
Hilmi Maraqa, Tahseen Al Natsha, Abdeh Qader Al-Sharabati, Hisham Zaloom, Samar Bader

1
Hebron's old town, a complex masonry maze.
2
Traditional cooling devices: water filled pipes chilled by breezes.
3
Existing structures are very solid.
4
A semi-covered court.

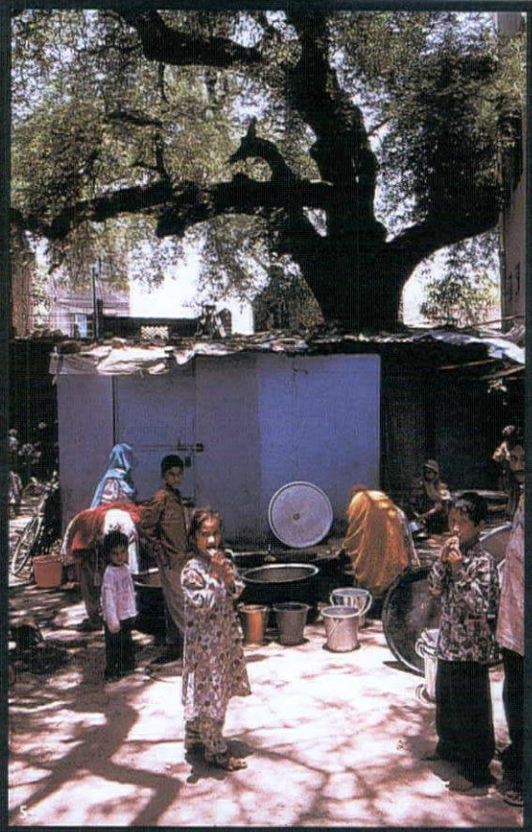


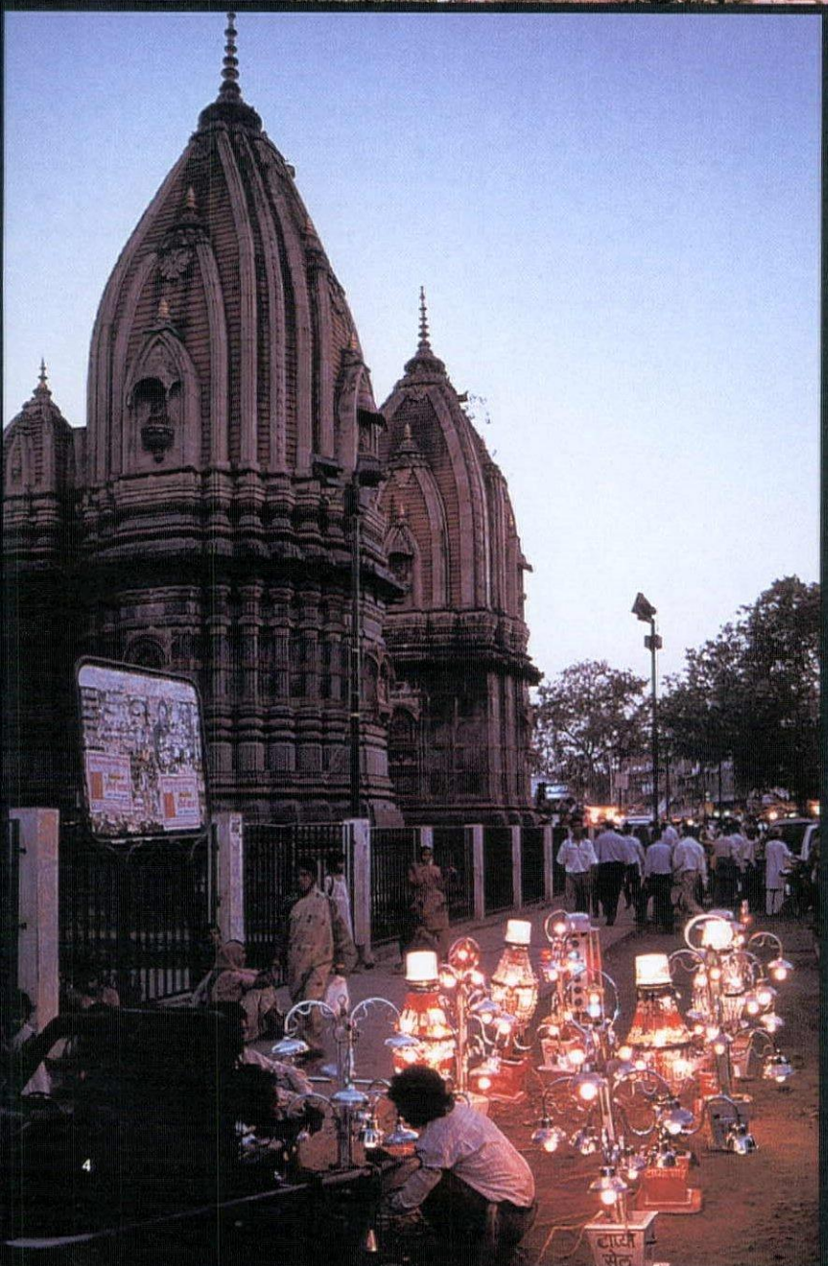


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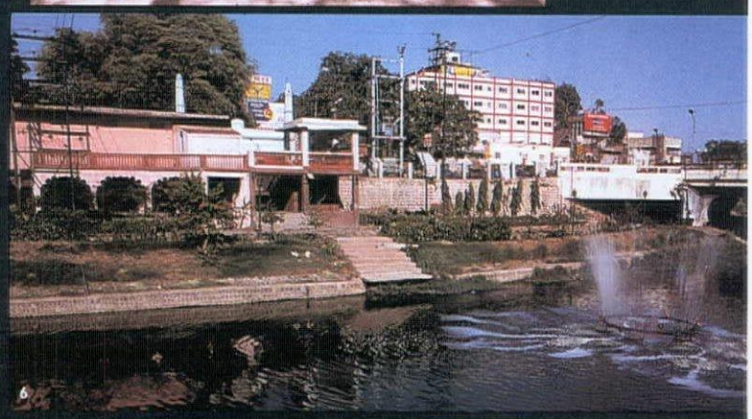


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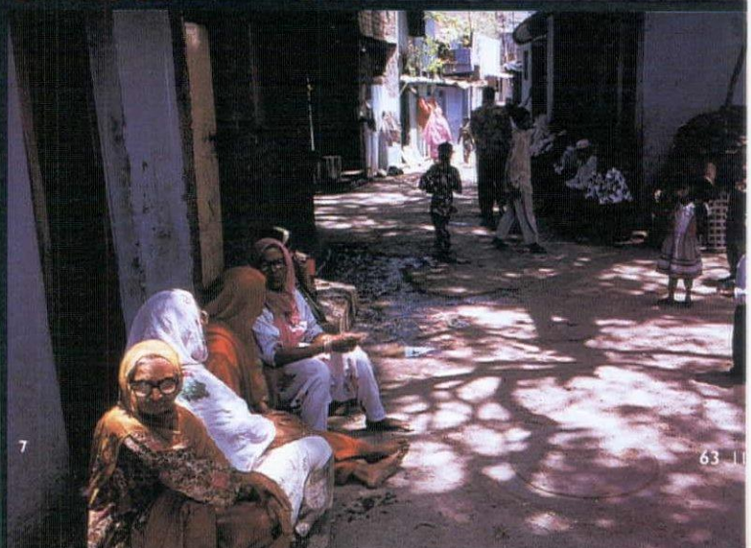




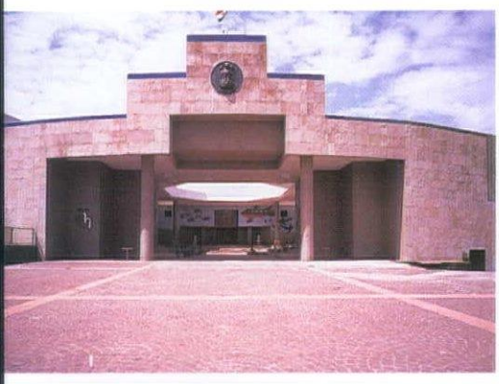
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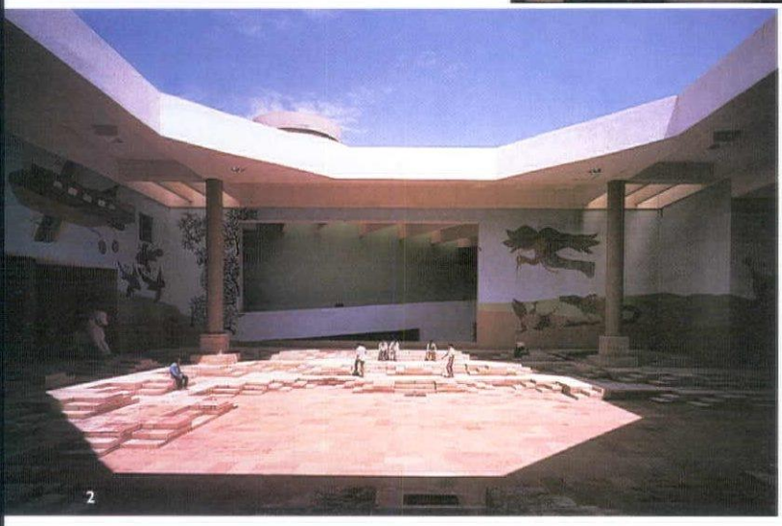


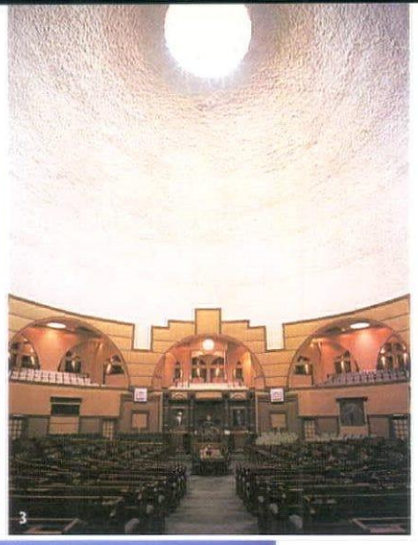
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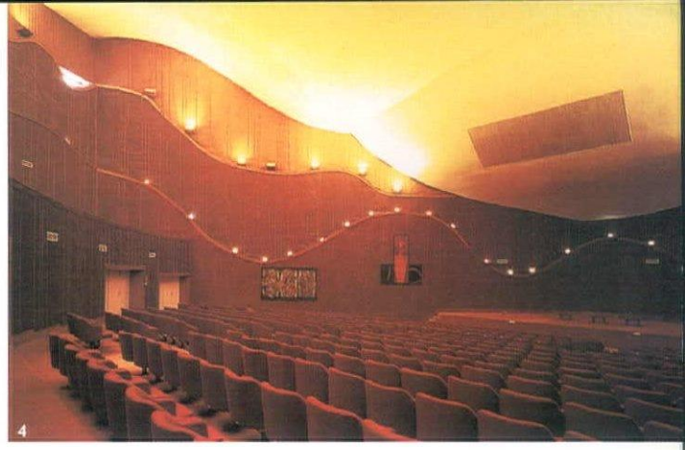


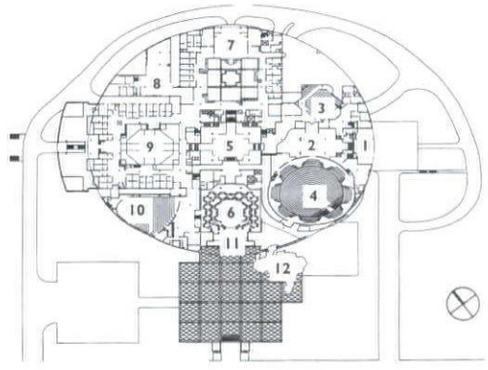
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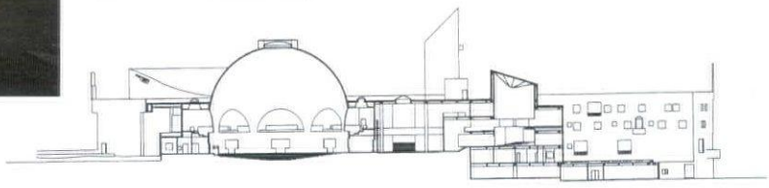






1 VIP entrance
2 legislators' foyer
3 Vidhan Sabah (Lower House)
4 Vidhan Parishad (Upper House)
5 central hall
6 people's court
7 cabinet room
8 library
9 court
10 combined hall
11 public entrance
12 reflecting pool

plan (scale approx 1:3500)



section through Vidhan Sabha, legislators' foyer and Vidhan Parishad

STATE ASSEMBLY, MADHYA PRADESH, BHOPAL, INDIA
ARCHITECT
CHARLES CORREA

1
Celebratory public entrance ...
2
... leads to the court of the people.
3
Vidhan Sabha (Lower House).
4
Combined hall.

BHOPAL

A monumental statement of democracy and regional identity draws on tradition without pastiche.

The Vidhan Bhavan, the State Assembly of Madhya Pradesh at Bhopal, has been shown at some length in these pages (AR August 1997), so this note is largely a reminder. Charles Correa planned the building as a monument on its hilltop site overlooking the city, but at the same time, he wanted it to be largely permeable by ordinary citizens, with large open courts and a carefully graded hierarchy of spaces to allow the public to inspect the activities of their legislators as closely as possible.

The circular plan accommodates four main elements: Lower House, Upper House, the combined hall and a major library as well as administration. Open courts connect the enclosed spaces with circulation running cloister-like round their perimeters. Forms and volumes are derived by reinterpretation of local types. Traditional red sandstone, handmade tiles and large contemporary murals, sculpture and paintings created by artists from Madhya Pradesh enliven the building and make it readable to the public.

The technical assessor reported that the complex works well, and that the strategy of using natural light and ventilation in most of the spaces was successful (the air-conditioned chambers apparently have good acoustics). He had some reservations about craftsmanship, but the project (initiated in 1982) has had a horrendous building history, with works stopping on site for years while state and contractors argued over the works; it was finally inaugurated in August 1996. The assessor found no signs of constructional defects or vandalism, and his report ends with the words of Prashant Khirwadkar, head of the local Environmental Planning and Coordination Organization: 'architects in Bhopal are very proud of this building, and we also respect Charles Correa ... We used to come to the site whenever he was there during construction, just to learn from him.'

Architect
Charles Correa
Photographs
Rem Rahman

LEPER HOSPITAL, LASUR, NR CHOPDA, INDIA
ARCHITECT
PER CHRISTIAN BRYNILDSEN AND JAN OLAV JENSEN

CHOPDA

A haven from a hostile world, built with local labour to serve the 'outcasts of the outcasts', this refuge was an instant success.

Clara Lerberg started working in the Norwegian Free Evangelical Mission of the Bethel Pentacostal Church in Maharashtra during 1934 and, in 1983, she initiated the idea of a leper hospital to give the outcasts of the outcasts a 'door of hope'. The site is outside Lasur village near Chopda in the Jargoan region of the state, an area that is scarcely tranquil, being thickly populated with tigers, leopards, hyenas and bandits. Traditionally, the population has clustered in villages for safety, and individual dwellings are made defensible.

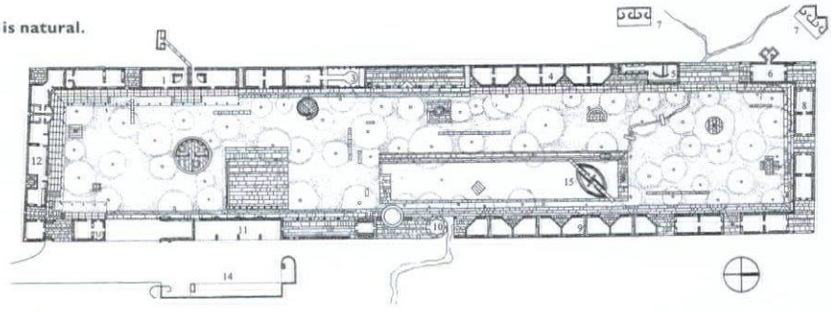
Two young Norwegian architects, Jan Olav Jensen and Per Christian Brynildsen, were asked by Clara Lerberg to prepare a design, and construction began in June 1983. A rectangular defendable plan was evolved, with linear buildings four metres wide forming the perimeter of a central 'paradise garden'. Construction was with local labour, crafts and materials.

At the height of the works 70 people laboured on the site but the only machines were a lorry and a concrete vibrator. Sandstone came from the neighbouring hills, bricks from nearby villages, teak from the forests and lime was ground and mixed on site. The shallow brick vaults are covered, Gaudí-like with broken tiles, the waste of a nearby factory; the white ceramics are both waterproof and heat reflective. The technical assessor reported that the building programme was never completed because, as soon as minimal facilities were available in June 1985, patients arrived asking to be cured so the mission decided to spend the rest of the building budget on running the hospital. This has caused some problems with the fabric, and further difficulties have been encountered with a sinking water-table that has made the original well dry (a much deeper one had to be drilled). Patients unused to indoor plumbing do not seem to be able to get the hang of the bathrooms. The funding largely comes from private donations, so patient care naturally takes precedence over maintenance.

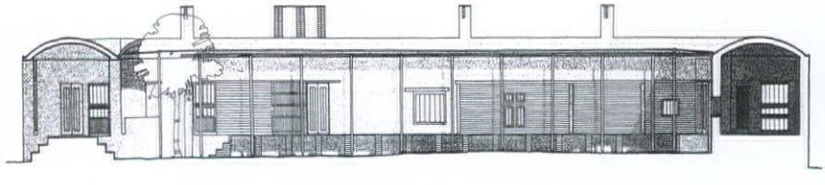
But problems are comparatively trivial compared to the achievements. The hospital serves hundreds of out-patients; residents work in the surrounding fields and tend the buffaloes for their milk, so supporting themselves. Though the carp pond has dried out, the courtyard with its trees and flowers is a paradise garden, a refuge in a harsh and often pitiless world.

As the master jury remarked 'Its architectural form is unpretentious to the extreme' but its concepts 'are of the highest order'.

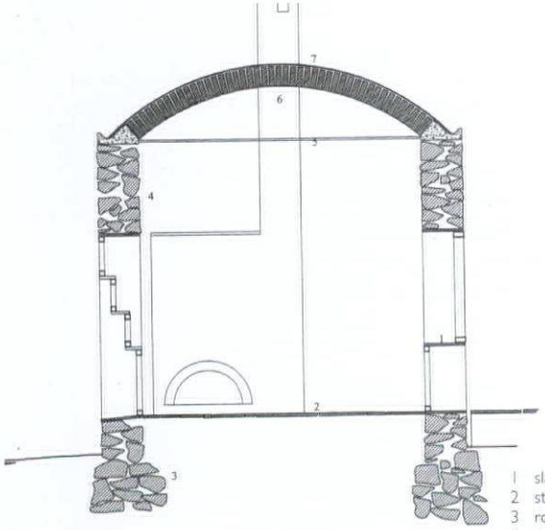
1
All materials and labour were local.
2
The accommodation forms a protective wall round the ...
3
... tranquil garden in the court.
4
Roofs are covered with broken light-coloured tiles to reduce heat gain.
5
Brick vaults tied with steel bars bear on massive walls and piers.
6
Communal kitchen: patients are encouraged to take part in their own welfare.
7
Roofs are used as terraces in clement periods.
8
All environmental control is natural.



plan



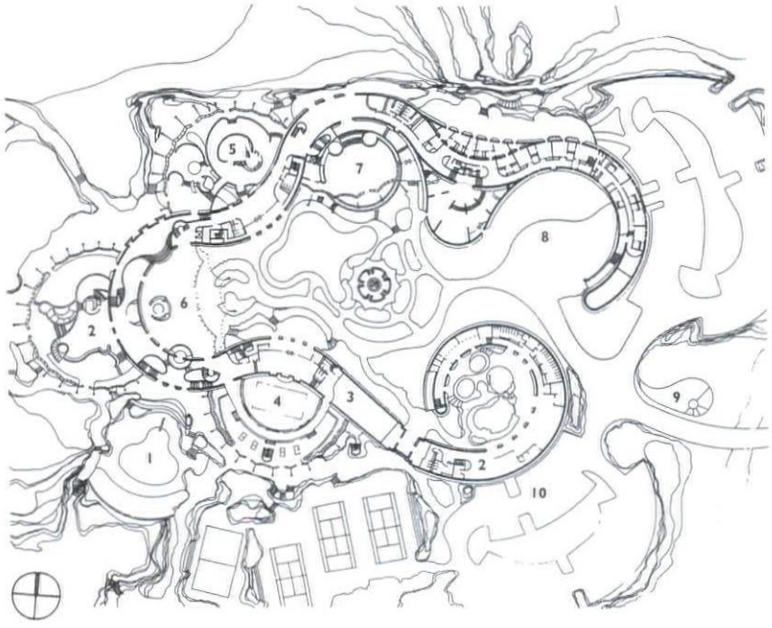
east-west section at south end



1 slate cill
2 stone slabs
3 rock footing
4 rubble wall
5 steel bar
6 brick vault
7 glazed tiles

detailed section

Architect
Per Christian Brynildsen and Jan Olav Jensen
Photographs
Ram Rahman



1 swimming pool
2 lounge
3 bowling alley
4 multi-purpose hall
5 restaurant
6 reception
7 banquet
8 drop off
9 gate house
10 parking

RIYADH

An abstraction of traditional architecture, the Tuwaiq Palace is a hospitality centre for the Saudi government.

HOSPITALITY CENTRE, RIYADH, SAUDI ARABIA
ARCHITECT
OHO JOINT VENTURE

1
Tents swell out round the masonry wall.
2
Terraces are used for recreation by citizens and guests alike.
3
The fortress in the desert.
4
Oasis is appreciably cooler than the plateau.
5
Reception.
6
Pavilion in the oasis: stained glass by Bettina Otto.
7
One of the lounges with fountain.

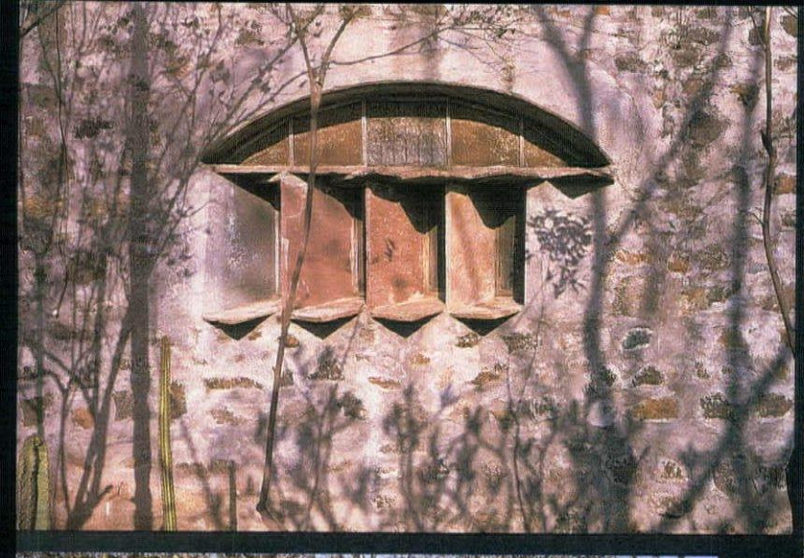
When a limited competition was held for a diplomatic club in Riyadh in 1980, the sponsors were impressed by two quite different submissions: a terraced, walled building by the Saudi practice Omrania, and a tent scheme by Frei Otto with Buro Happold. The two teams of designers were asked to produce a joint scheme, and a special firm, OHO, was set up. Its only work combines the two elements with considerable finesse.

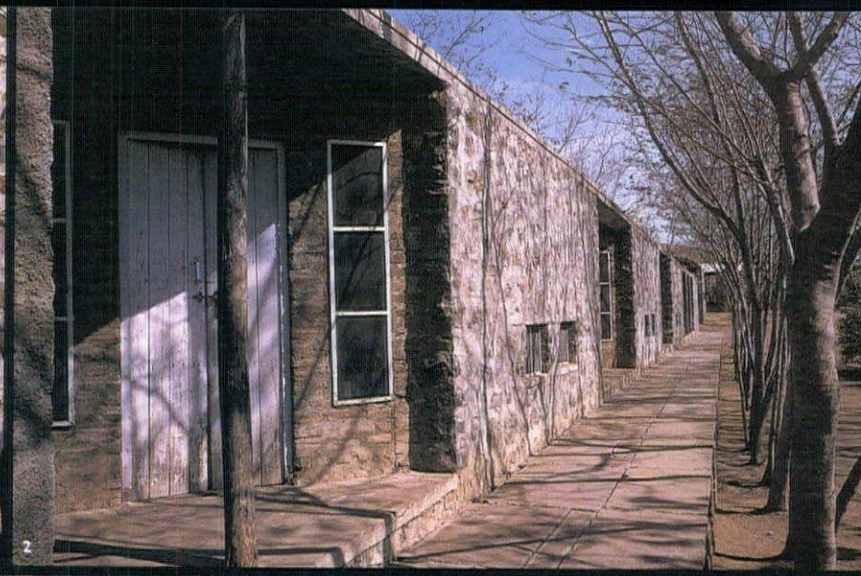
A sinuous inhabited wall 800 metres long and between seven and 13 metres wide establishes a contained space on a high arid plateau north-west of the city; it contains the main circulation and services spaces. Spreading outward from the wall are three big white fabric tents which house the major public rooms; within the wall are two tents covered with blue fish-scale tiles enclosing reception area and banqueting hall. The wall, covered in blocks of local limestone, is very stiff because of its plan form and reinforced concrete structure; the tents hang from it, supported at their outer edges on V-shaped struts. Wall and fabric structures recall desert archetypes of fortress and tent. (The brief called for a project that would respect tradition, while not aping old buildings.) The enclosed space is of course a metaphor of oasis, an effect emphasized by leaving the plateau, which rises sharply from the green valley of the city's excellent chain of parks, almost entirely bare and seemingly untouched.

The garden inside with its happy colourfully roofed tent pavilion works extremely well; planting has grown gracefully and luxuriantly, shading the place and appreciably cooling it. Internal climates are entirely air conditioned. This seems unusual in an Aga Khan prizewinner, for the awards have become increasingly ecologically conscious over the years. But the building (which has been taken over by the government as a hospitality centre, after the initial proposal for the diplomatic club fell through because of lack of demand) has to have the same standards as all other official buildings in Saudi Arabia. Even so, construction (the massive solid wall with its thermal fly-wheel effect, and the tents which have double skins to promote convection ventilation) does reduce cooling demands compared to more conventional structures, and the control systems are as sophisticated and responsive as can be found anywhere.

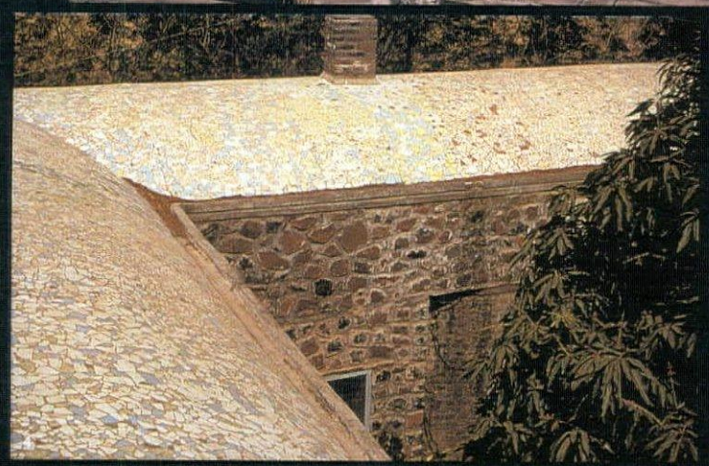
In fact, apart from the stone skin, all components came from outside the country, as did the work force, from labourers to consultants. The technical assessor gently put the point that any time a replacement part is needed, it has to be imported, and he remarked that the stone skin is actually a mask over the concrete structure. But he did make the point that the place is an amenity not just for government guests but for the local community: in the evenings and on holidays, Riyadh families wander among the trees of the oasis and up on the terraces, looking out to the skyline of their city or over the vast awesome panorama of the desert.

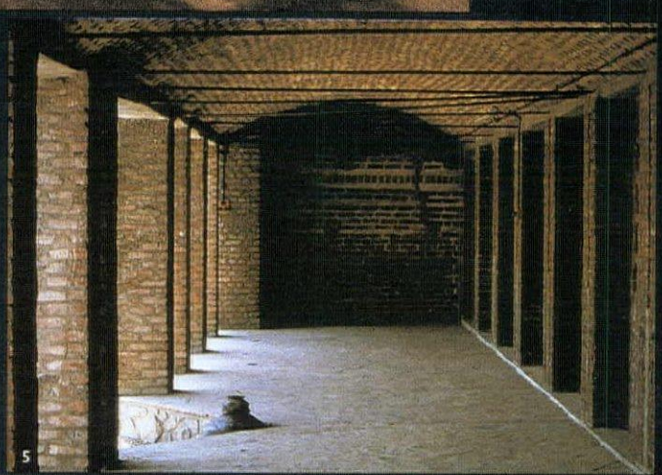
Architect
OHO Joint Venture: Atelier Frei Otto; Buro Happold; Omrania
Photographer
Akram Mohamed

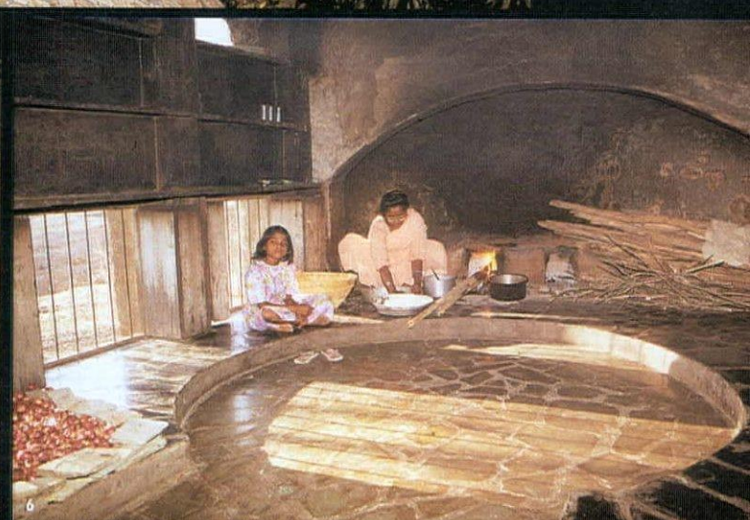


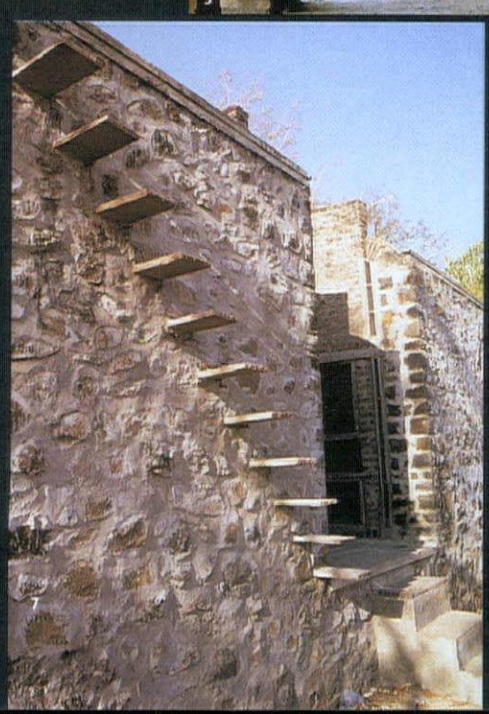


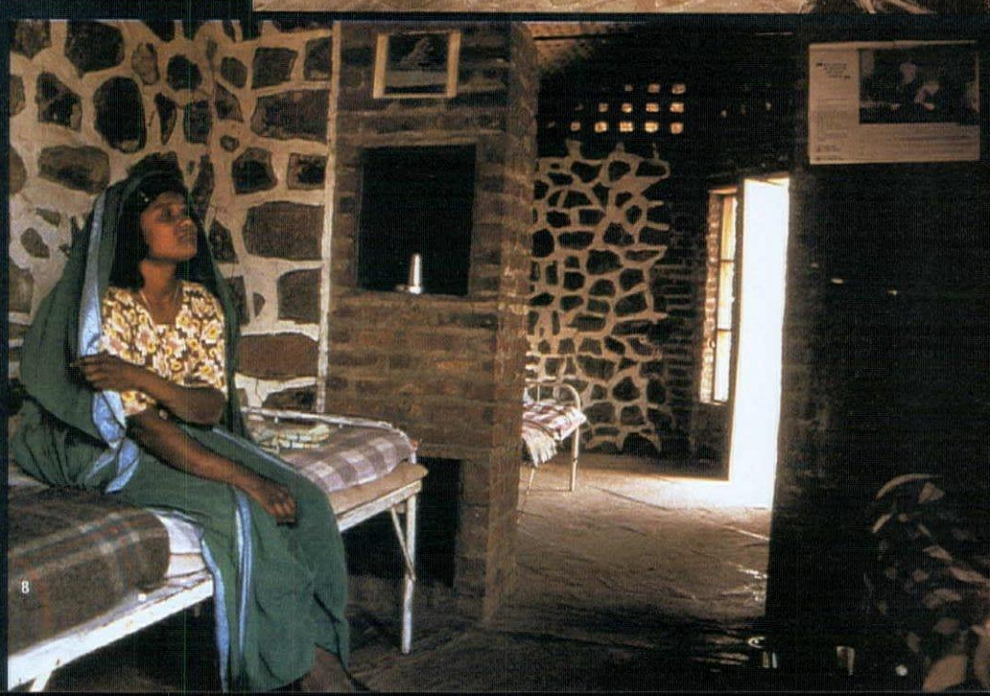




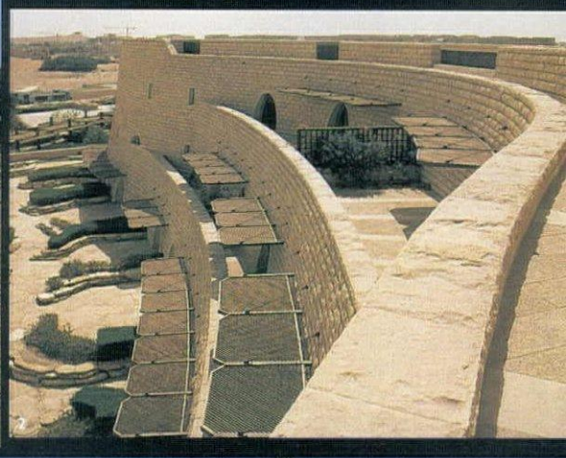


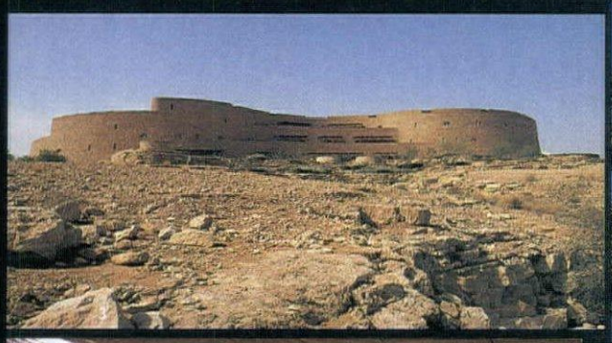




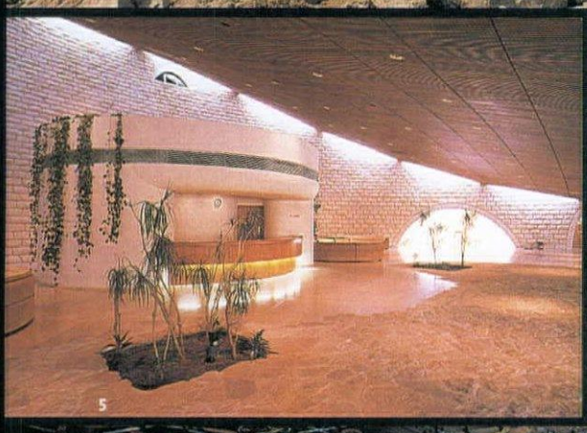




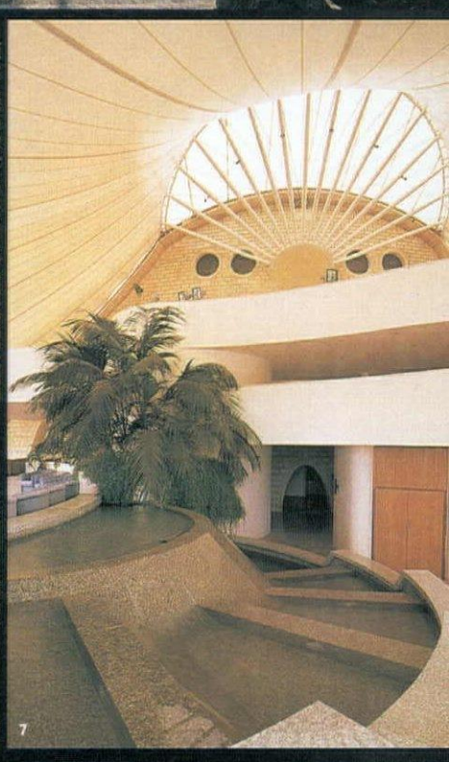


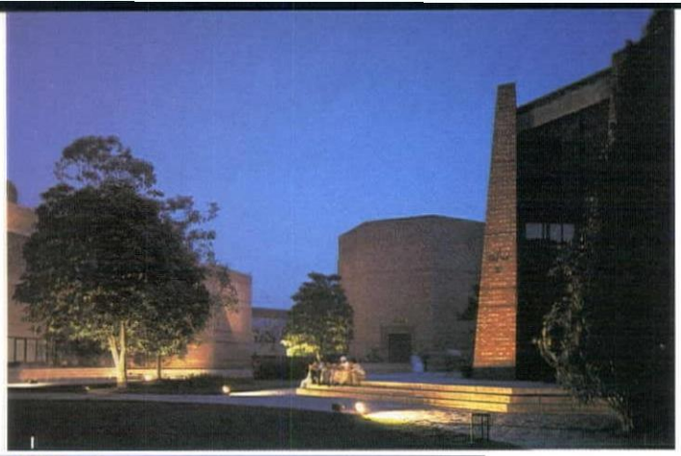


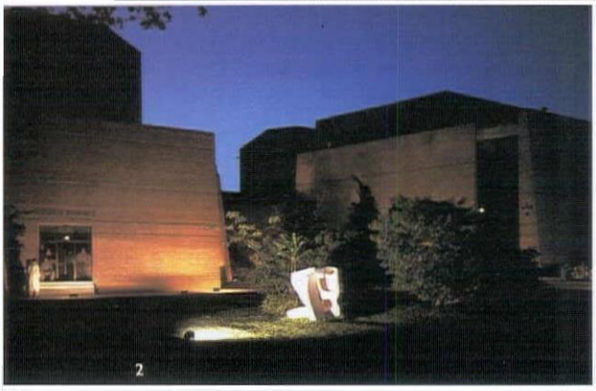




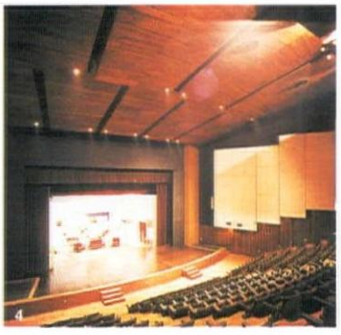












ALHAMRA ARTS COUNCIL, LAHORE, PAKISTAN

ARCHITECT

NAYYAR ALI DADA

1 phase 1, theatre completed 1981
2 phase 2, gallery completed 1984
3 phase 3, small theatre completed 1985
4 phase 4, lecture and recital halls completed 1992

To link the old centre of Lahore and the cantonment, the Mall (now called Shahrah Quaid-e-Azam) was laid out in the nineteenth century; it was lined with important government buildings set in gardens. The thoroughfare remains heavily used today, and on summer evenings people take their *paseo* under the shade of the trees.

One of the most popular places on the route is a corner site occupied by the Alhamra Arts Council, with its theatres and galleries set in courts and gardens. The technical assessor reports that 'The place is always busy ... People come from all walks of life ... [they] seem to be quite at ease while strolling along or sitting in the court, vendors of all kinds gather at the front, as they can count on ample clientele.'

The complex started nearly 20 years ago. It began with a theatre designed by local architect Nayyar Ali Dada, who has been responsible for all subsequent phases. Massive, largely imperforate battered brick walls surround an elongated hexagonal plan, an idiom which is continued in the subsequent galleries and gives the complex coherence. The red brick is supposed to recall the red sandstone Mughal monuments that dignified the city in the seventeenth century.

The main court is the hub of the centre and brings all phases of the organism together. The original theatre is to the west, with a new smaller one to the north, arranged so that it can share backstage facilities. The second phase, which defines the east side of the court, includes art galleries and offices. The most recent phase, to the north of the court, comprises lecture and recital halls which were completed in 1992. Plans of both these phases are formed of linked octagons, which relate genially to the hexagonal forms of the theatres. Internal spaces are workmanlike and conventional.

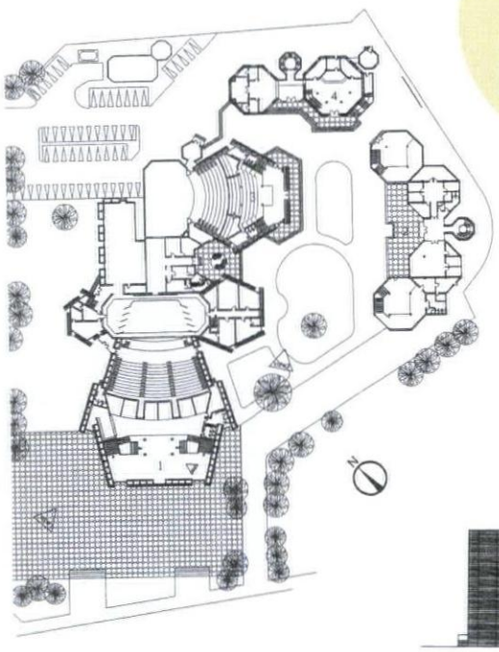
The technical assessor found few problems with construction, though the lightweight roofs of the theatres have leaked and have not got enough insulation because cost constraints prevented better specifications. The brick is a skin over in-situ concrete structures, and provides enough thermal mass to obviate the need for air conditioning except in the theatres. All materials and most of the labour force were local.

Architect
Nayyar Ali Dada and Associates: Nayyar Ali Dada, Tanveer Hasan, Ghazanfar Ali
Structural engineer
Shahid Hameed
Photographs
Saddi Samir

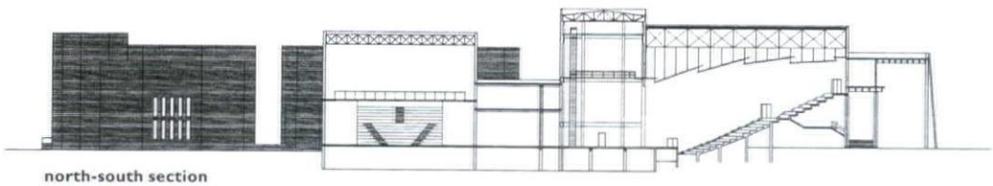
LAHORE

Progressively over two decades architect Nayyar Ali Dada has created a vibrant element of urban life.

1,2
The court at the centre of the complex; it is the social hub and a much needed public space in the city.
3
Foyer of big theatre ...
4
... one of the most popular places of entertainment in the city.



ground floor plan



north-south section

HOUSE, NR KUALA LUMPUR, MALAYSIA
ARCHITECT
CSL ASSOCIATES

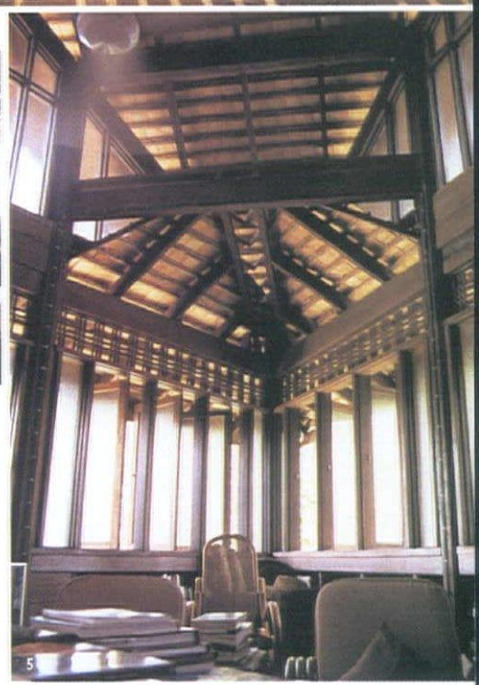




1
At the top of the site on an old rubber plantation.
2
Shingled roof.
3
Dining deck extends from living area.
4
As in traditional buildings, the house sits lightly on the earth.
5
Living area.

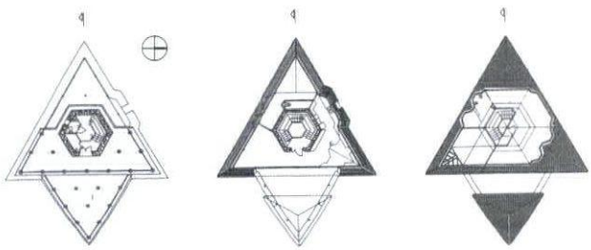






SELANGOR

Taking lessons from traditional architecture, this house has much to teach about building in the tropics.



ground, first and second floors



longitudinal section



north-west elevation

Jimmy C. S. Lim has built a reputation for ecological architecture based largely on domestic buildings, so it is appropriate that his Aga Khan Award should be given for a house. It is built south of Kuala Lumpur on an old rubber plantation. Lim has long been interested in old buildings and and what can be learned from them, and the Salinger residence has much in common with traditional Malay houses of the area, but this is not a pastiche.

By raising it on stilts, its impact on the ground is minimized, the living areas are exposed to breezes, forest creatures can be avoided and convection can act to ventilate the house vertically through its fundamentally pyramidal section. Siting was very careful: at the top of the plot, to get the best natural currents of air, and to facilitate water run-off during monsoons. Vertical circulation reaches the ground in a hexagonal stone core, and the stairs continue to crank through the living area up to the master bedroom on the second floor. In plan, the living level is two abutting triangles, the larger one enclosed with timber walls and strip windows shaded by wide overhangs of the shingled roofs. The smaller one is a dining deck, a verandah partly shaded by a pyramidal roof.

Lim and his clients hired a team of traditional carpenters from Kelantan to build the house using traditional techniques; there were no metal connectors. With the leader of the team, Ibrahim bin Adam, Lim worked out constructional details, and Adam selected the trees from which the house would be built. It took more than six years to turn the timber into components of the building and assemble them on site. The result is a house that has clearly learned much from traditional Malay culture, but which is informed by modernity.

Architect
CSL Associates: Jimmy Lim Cheok Siang (principal), Raymond Siew Ching Ng (draughtsman), Ibrahim bin Adam (master carpenter)

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HOUSE, JAPAN
ARCHITECT
SHIGERU BAN

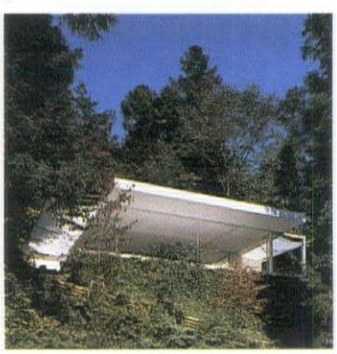
1
House backed into the slope of the hill and open to air, surrounded by terrace under oversailing canopy.
2
House sailing into treetops, seen from the road.

1

Without walls

In Japan interpretation of the house by an architect given to experiment has resulted in space at its most horizontally pure and abstract.

2



In the west, Shigeru Ban is best known for paper architecture, experimental buildings partly constructed with tubes built up from laminated layers of recycled paper. Combining them with other materials he has successfully designed a number of diverse buildings – a gallery and a library extension (AR August 1995), a church and paper log houses for refugees (AR September 1996). Such imaginative, environmentally friendly use of recycled paper is remarkable enough; but in exploiting the potential of paper – which is the most Japanese and the most insubstantial, of materials – he retains a rigorous architectural grip. Ban himself acknowledges the influence of the New York Five, in particular of John Hejduk under whom he studied at Cooper Union in the early '80s; and his spare elegant structures, strong geometries and fluid spaces express continuing exploration of Western ideas and their delicate fusion with Japanese tradition. This is also true of another body of work carried out over the last 10 years or so.[1]



3

HOUSE, JAPAN
ARCHITECT
SHIGERU BAN

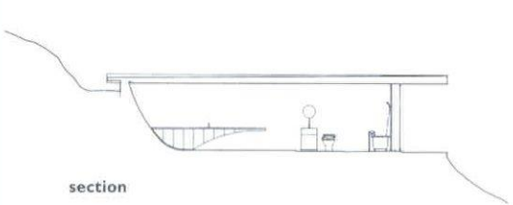
3
Kitchen and bathroom zones on east can be screened by sliding partitions if required.
4
Looking south over neighbouring roof and forest. All furniture, like kitchen and bathroom units, and paper tube *chaise longue*, designed by Ban.

The Wall-less-House is the eighth in a series of case study houses; each one, designed for a willing client, is an architectural experiment, a vehicle for exploring the nature of space and the relationship of building to landscape. The enterprise was inspired by the Californian Case Study houses of the '50s, designed by architects such as Eames and Neutra as prototypes for living in a new age of technological optimism.

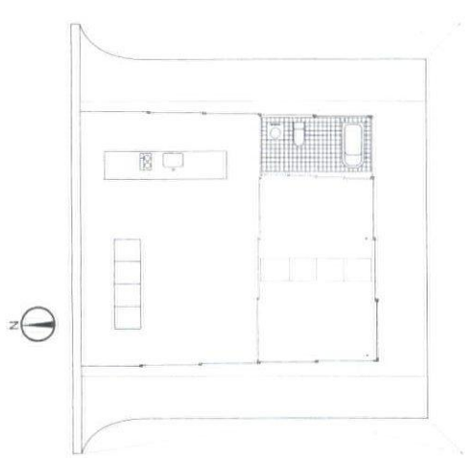
Riichi Miyake[2] describes Ban as an empirical architect 'not afraid of trial and error'. Implicit in his experiments with paper architecture is his interest in the potential of technology to change methods of construction, achieve economies and create more adventurous spaces. His delicate externally tensioned structure of cheap materials, designed for the first Case Study – the tiny I-House – enclosed light-filled airy volumes and came in under budget, while imaginative use of the site provided the house with a prospect it would otherwise not have had. Ban often manipulates the familiar. The Furniture House for example, which is Case Study 4, is a dwelling constructed out of furniture. Apart from the novelty, the arrangement simplified construction; a shelving wall composed of self-supporting units, exactly sized and built off site, could be handled by a single person.

If there are characteristics common to what are a very

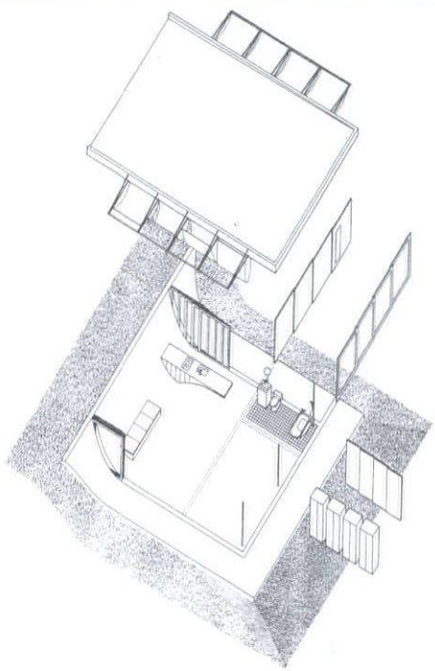
4



section



plan (scale approx 1:250)



exploded axonometric



5

HOUSE, JAPAN
ARCHITECT
SHIGERU BAN

diverse series of houses, they arise out of Ban's preference for fluid horizontal spaces, for deck-like structures that often seem barely poised in the landscape. The Wall-less-House is his most extreme abstraction so far. Here, space for living has been reduced to a single pure volume described by an unimpeded flow of floor and roof. Minimally enclosed on three sides, the house is set among treetops and looks towards distant hills.

The site within a forest sloped sharply so the rear of the house was dug into the hill, and the excavated earth used to create a level floor. The embedded rear curls up to meet the roof and in doing so absorbs the backload of earth. By cantilevering the flat roof from the upturned slab, Ban was able to work with the most slender of vertical columns. Since the columns would bear only vertical loads, their diameter could be reduced to 55mm. Sliding panels pulled out from the rear wall and running along the inside edge of the surrounding terrace, replace external walls. The interior has a 'universal floor' on which the kitchen, bathroom and lavatory are positioned without enclosure; but such pure austerity can be mitigated by light sliding panels and cupboards. P.M.

1 'Shigeru Ban as an Empiricist' by Riichi Miyake, in *The Japan Architect Monograph: Shigeru Ban*, No 30, Summer 1998.
2 *Ibid.*

Photographs
Hiroyuki Hirai

5
Movable cupboards 2.1 metres high, designed by Ban, can be used to subdivide space.

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scala



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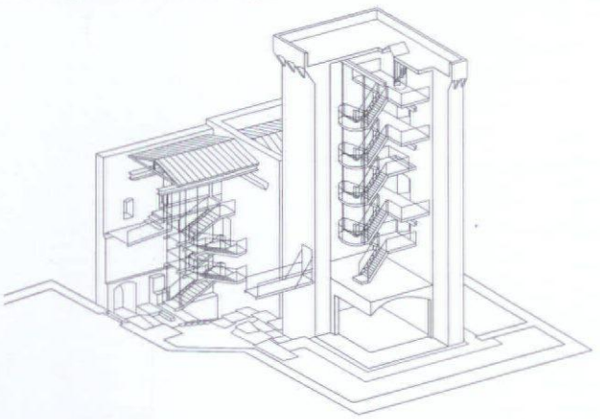
MUSEUM, TREVI, ITALY
ARCHITECT
CAUTILLI, MORGANTI & MORGANTI

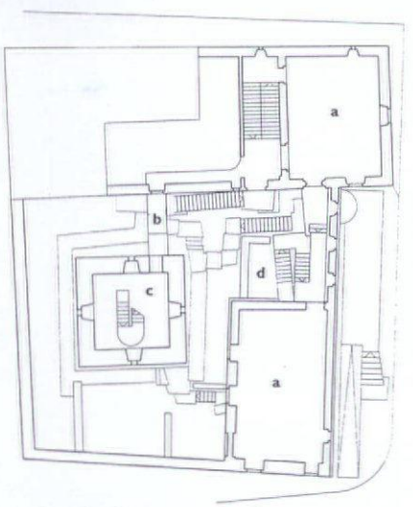
Castle keep

This renovation of a medieval castle in Trevi sensitively inserts contemporary elements within a historic shell.



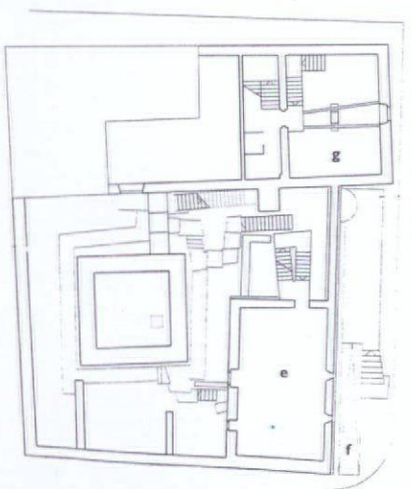
1
The dramatic profile of the medieval castle soars above the town.
2, 3
New bridges and stairs are threaded through the stone shell of the castle.
4
Contrast between old and new elements is made explicit.
5
The hovering presence of the stair draws you through the interior.
6
Detailing is economical and elegant.





a conference room
b bridge
c keep
d Roman cistern
e visitors' centre
f entrance ramp
g museum

upper floor plan (entrance to keep)



lower level plan (scale approx 1:550)

Carlo Scarpa's influence on restoration of old buildings has been almost entirely benign. The mixture of tender and understanding repair of old work with clear modern interventions in twentieth-century materials, which Scarpa demonstrated so imaginatively at the Castelvecchio in Verona, has been echoed all over Europe.

One of the most convincing recent examples of the approach is the Caetani castle in Trevi. It was one of the medieval fortresses which defended the Via Latina in the lower Lazio, the region immediately north of Rome. Dominating the still largely untouched dense pattern of vernacular streets and houses of the old town, the castle (built on the site of a Roman fortress) had fallen into great disrepair, with only the partly decayed stone keep and curtain wall remaining. Over the centuries, all the timber parts (including the upper floors) had rotted or been looted, leaving one stone shell within another.

Gianfranco Cautilli, Mario Morganti and Renato Morganti were asked by the municipality of Trevi to convert the ruin for use as the local archaeological museum and visitor centre for the Simbruini mountain national park. The architects' fundamental strategy was to repair the broken stone shells back to their original skylines using local porous limestone. The stones will probably weather until they are the same colour as the medieval ones, but there is no attempt to make the new work look like old; pointing is in proper mortar with raked joints, yet the stones do not emulate the original shape or bond.

And there has been no attempt to restore missing wooden floors or frame openings. Levels are very complicated, particularly down at the Roman top of the mound. They are related by new stairs, external ones with stone treads, internal flights with timber. A bridge connects to the keep from the perimeter accommodation. All these new pieces have steel structures: rolled steel members are under the bridge and stairs; flights are suspended on steel rod hangers from I-beams which span between the stone walls. Balustrades are of glass within steel frames, black like the beams and stringers. Detailing throughout is precise, economical and elegant. Roofs over the keep, and over the gallery which links the upper levels of the accommodation within the curtain wall, are industrial decking over timber members which bear onto steels between stone.

Contrast between old and new is most dramatic in the keep. What had been a stone chute of space open to the sky has been lidded, and is now inhabited by the hovering presence of the steel and wood stair which is adjusted to bring you out to landings that offer views through original openings in the massive walls. Similar prospects over town and country must have been familiar to the Castilians and their châtelaines. Throughout, you are made aware of the past while standing on the present; you are invited to make your own commentary on the original work and the often moving changes which have occurred over the life of the building. Such interpretations would have been completely impossible if there had been an attempt to restore the castle to its medieval state: in any case, there can be no definitive version of a building that has continuously changed over a millennium. Now it has altered again, and will doubtless do so in future. But the new work does not prejudice what will be passed on while in our time it adds to what we have inherited.

ANNA MANTINI

ORGATEC

Orgatec, the biennial furniture fair held in Cologne, took place this year from 22-27 October. In spite of the absence of two important firms – Herman Miller and Knoll International – and what must be a widespread feeling that there is little more you can do to the tilting swivelling office chair, there was much that was fresh. Notably on the Haworth stand. Aesthetically, the firm's new office chair may lack the sharp stylishness found on competing stands but this chair moves with the body in all directions. Otherwise, the influence of architectural minimalists continues – in, for example, the design of the elegant translucent screen from Bulo, and of the pared down table from Ahrend. The idea of the mobile, intercommunicating workforce gathers momentum, increasingly expressed in the design of slender pieces of easily movable, infinitely flexible furniture, of storage that makes information easy to retrieve, and accessories – like Haworth's white board – for instantly recording messages and notes.





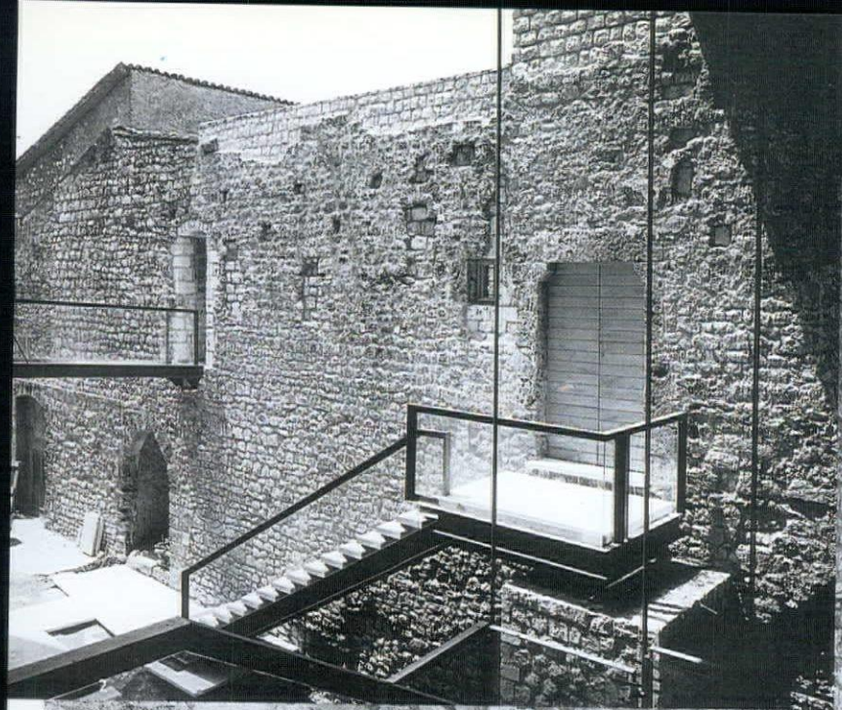


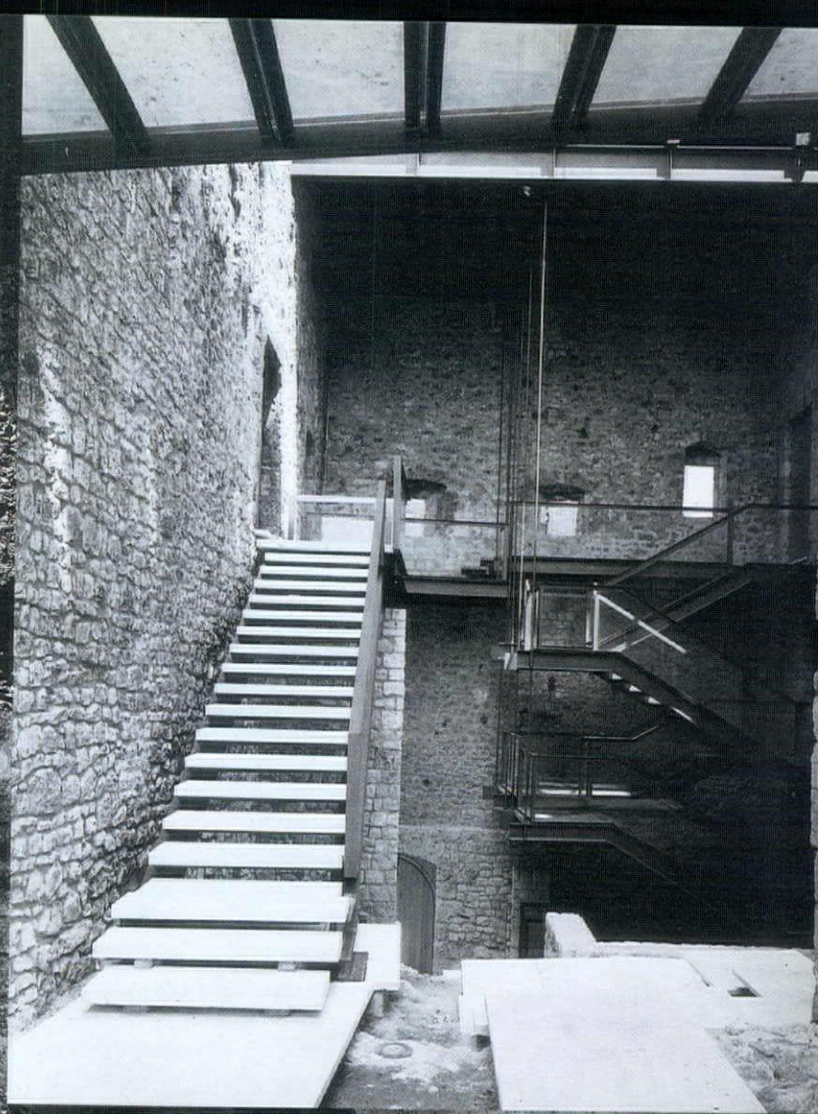


501 STEELCASE STRAFOR

Please is the latest task seating range from Steelcase Strafor. Designed by Rob Scheper, the range includes a task chair and sled-based and four-legged visitors' chairs. The Please task chair comfortably supports 'any posture' and the range is available in a number of fabrics, including fabrics by Gabriel and Kvadrat. To find out more, visit www.steelcase-strafor.com

Tel: +44 (0)1753 680200 Fax: +44 (0)1753 683673







3





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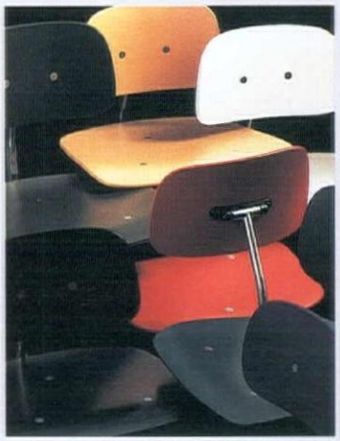
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502
K+N INTERNATIONAL

Tensa new seating range designed by Ito-Design and including office and visitors' chairs and benches. Swivelling, tilting office chairs have anatomically shaped seats and backrests, various ergonomic controls and ventilated upholstery embedded with tiny springs that help support the body. But the most appealing, though optional, feature is a coloured bobbled back-rest, made up of hemi-spherical pads, that massages the spine.

Tel: +44 181 658 2247
Fax: +44 181 658 2246





503 FRITZ HANSEN

Fritz Hansen's Kevi chairs, designed by Jørgen Rasmussen, have been rejuvenated. The range includes chairs for offices, conferences and meeting rooms. Swivelling, tilting office chairs have mechanisms which provide ergonomic comfort and are easy to adjust. The classic coloured Kevi 2003, shown here, is available in various colours as well as natural beech.

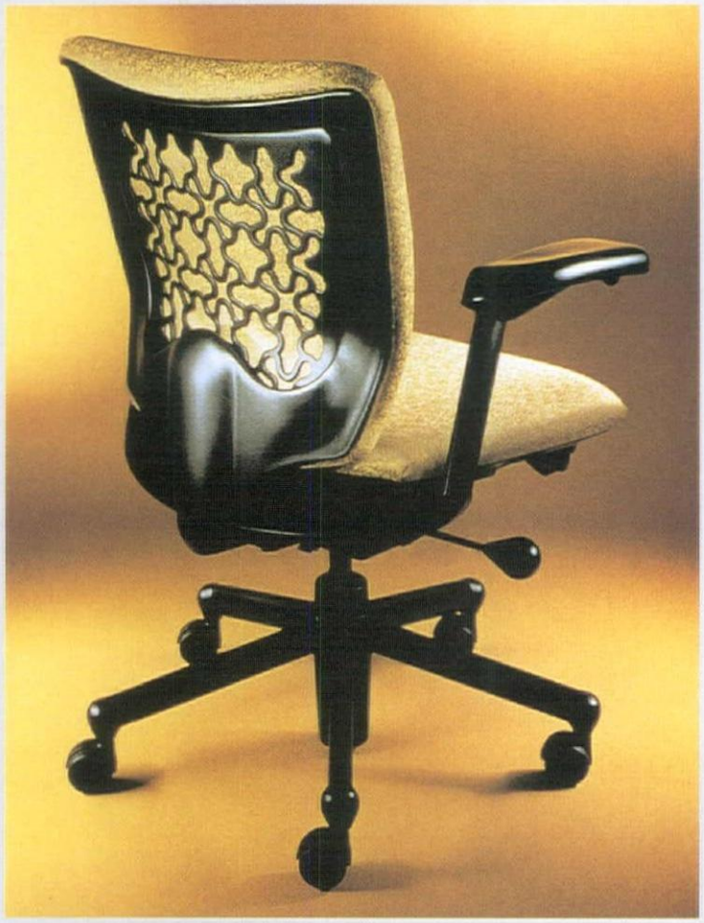
Tel: +45 48 17 23 00 Fax: +45 48 17 19 48

504 GIRSBERGER

Zampano office seating designed by Dieter Stierli and the Girsberger design team. The swivelling chair, with adjustable armrests, coat hanger and synchronic adjustment, is one of a range which also includes a conference and high-backed office chair.

Tel: +44 171 288 6142
Fax: +44 171 288 6134





505 FREDERICIA

Tema: the firm's new seating with an undulating back for public spaces, designed by Nanna Ditzel. The system consists of two rows set in a line and facing away from each other, of upholstered seats with convex wooden backs. The seats are placed alternately so that their backs, concave on the outer side, support small tables and form a sinuous line.

Tel: +45 75 92 33 44 Fax: +45 75 92 38 76



506 HAWORTH INC

Haworth's TAS chair, by Californian practice 5D, is an ergonomic breakthrough. As well as supporting the lower back, tilting forward and backward, and having a back and seat that goes up and down, this chair moves with you as you fidget and lean from side to side. Supporting and flexing, it responds to every body movement and is extraordinarily comfortable, but more than this, it remains so over time.

Tel: +1 616 393 4293 Fax: +1 616 393 3420

PRODUCT REVIEW

507 BULO

Lio free-standing screening system made of translucent polypropylene which is fire-retardant, anti-static and UV-proof. The screen turns corners and can be any length. Components of the modern office – like shelving and storage – are integral.

Tel: +32 15 28 28 28 Fax: +32 15 28 28 29





508 LENSVELT

Rizzatto: elegant table system from Lensvelt.

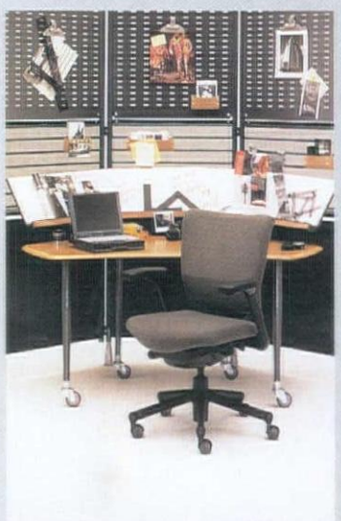
Tel: +44 (0)171 309 6309 Fax: +44 (0)171 309 6310
Tel: +31 76 5722000 Fax: +31 76 5722022

509 KLAESSONS MOBLER

JZ Work: a wooden foldable office box by Jacob Zeilon. With work surface, shelving and simple storage, it can be quickly folded into a neat package.

Tel: +44 (0)1869 340078 Fax: +44 (0)1869 340868
Tel: +46 585 107 30 Fax: +46 585 314 14





510 HAWORTH

Mind Gear: office equipment to let you unload your short- term memory into your immediate surroundings. 'Memory shelves', wire-framed with perforated steel surfaces, set around your desk store papers, projects, and so on at eye-level; white boards accept scribbled notes which can be wiped off; clips hold papers and can be attached to shelves and worktops; and trolleys and monitor stands support computer components.

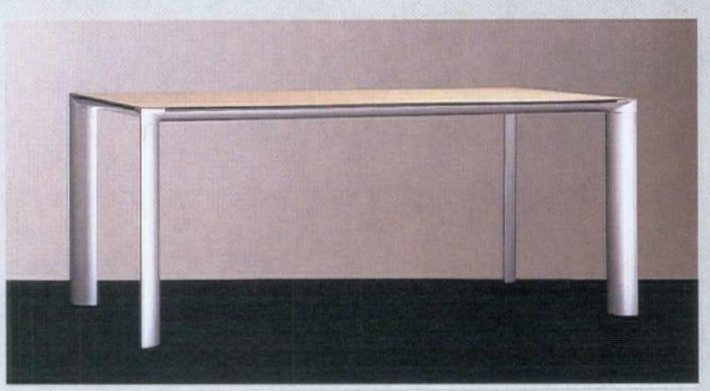
Tel: +1 616 393 4293
Fax: +1 616 393 3420

511 SEDUS STOLL

The firm has launched itself into café/restaurant furniture, offering 20 new chairs and five new tables at Orgatec. In this new venture it enlisted the talents of two German design practices – Bert & Bert, and Wulf Schneider & Associates – as well as its own designer, Matthias Seiler.

Tel: +44 (0)1285 713913 Fax: +44 (0)1285 713920
Tel: +49 775 184 330 Fax: +49 775 184 290





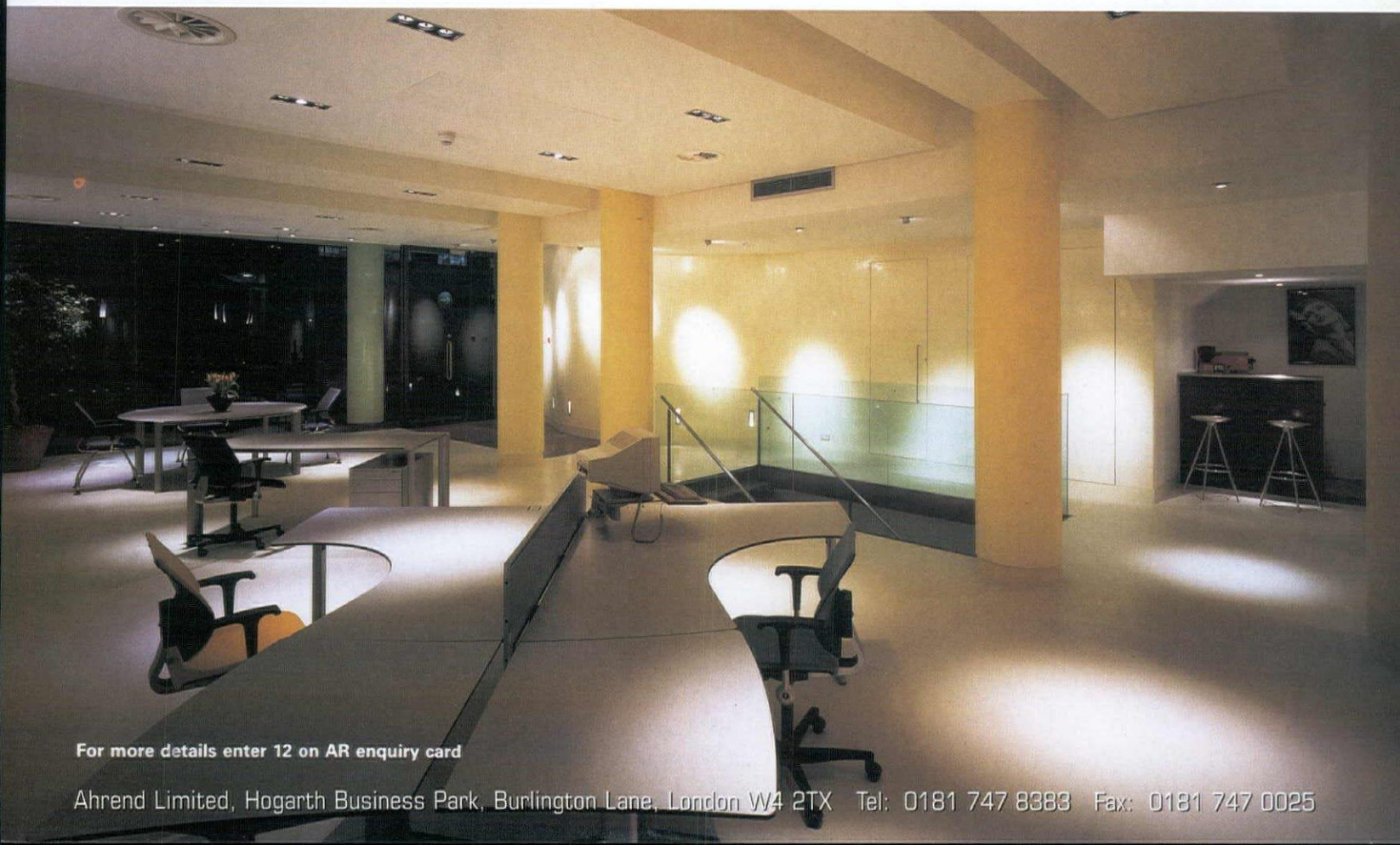
512 AHREND

The firm launched a series of elegant office/conference tables, called Ahrend 1030, by architect Wim Quist. The tables are available with a number of different tops and can be adjusted in height by mechanical or electrical means.

Tel: +44 (0)181 747 8383 Fax: +44 (0)181 747 0025
Tel: +31 2053 05200 Fax: +31 2053 05201



ahrend



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Ahrend Limited, Hogarth Business Park, Burlington Lane, London W4 2TX Tel: 0181 747 8383 Fax: 0181 747 0025

If you haven't been lost in cyberspace or steamrolled on the information superhighway, you are probably someone who can keep up with the latest in digital technology. But do you also keep up with the latest in seating technology? If not, let Girsberger give you an immediate ergonomic upgrade with seating «soft» ware that's real virtuosity, not just virtual reality.

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High Performance Seating.

Girsberger London, Business Design Centre, 52 Upper Street, London N1 0QH, Tel. 0171-288 6142, Fax. 0171-288 6134 a branch of Girsberger GmbH, D-79342 Endingen. CH: Girsberger AG, CH-4922 Bützberg. USA: Girsberger Ind., Inc., Smithfield, NC 27577. TR: Tuna Girsberger, Istanbul.
Showrooms: Amsterdam, Ankara, Berlin, Chicago, Istanbul, London, Los Angeles, New York, Paris, Salzburg, Vienna.

http://www.girsberger.com



LANG GTSI KNOLL

REAL VIRTUOSITY, NOT VIRTUAL REALITY

For more details enter 13 on AR enquiry card

PRODUCT REVIEW



514 SEDUS STOLL

Sedus launched Movimento, a versatile range of mobile PC servers and tables. Initially designed as a mobile desk for home use, Movimento has been developed into a full-blown office system. The server will fit over a standard desk or table and can convert a meeting table into a desk.

Tel: +44 1285 713913 Fax: +44 1285 713920
Tel: +49 775 184 330 Fax: +49 775 184 290



516 FANTONI

Fantoni which makes the Meta Collection, designed by Mario Broggi and Michael Burckhardt, won the 1998 Compasso d'Oro at Milan for its Meta 45 desking range. At Orgatec the firm introduced an addition to the Collection. This is a new range of furniture called Life for conference rooms, reception areas and offices, their design incorporating materials such as etched glass and wenge wood.

Tel: +44 1483 894090 Fax: +44 1483 890203
Tel: +39 432 9761 Fax: +39 432 976297

513 HOLZÄPFEL

Horizonte: frameless, glazed, full-height partitioning with sliding doors. Side partitions can be fitted with shelving and ducting.

Tel: +44 181 658 2247 Fax: +44 181 658 2246
Tel: +49 7451 904 141 Fax: +49 7451 904 192



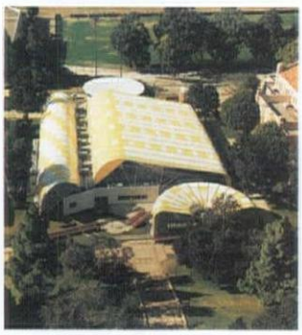
515 WILKHAHN

Project Office: part of the Conrack office system designed by Wiege. The system won a prestigious iF Design Award 1998 from the Design Centre, Essen. Designed for teamwork, the Project Office provides work surfaces, small writing tables and chairs, shelving units, screens and mobile units for technical and other equipment. All the pieces are mobile and can be easily arranged and rearranged as required.

Tel: +44 181 542 9343 Fax: +44 181 542 5730
Tel: +49 5042 999-120 Fax: +49 5042 999-245



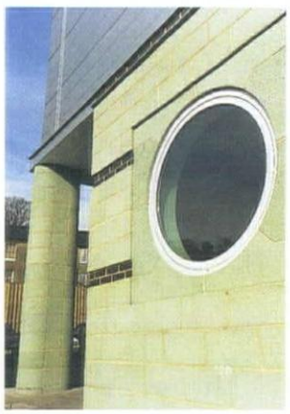
Specifier's information



Tensile fabric structures

Rubb Buildings Ltd offers a full turnkey facility for the design, production and erection of tensile fabric structures. An international company with production facilities in the UK, USA and Norway, and ISO 9001 certified, Rubb's expertise includes in-house design and a large engineering department. Rubb also manufacture structures with engineered frames in galvanized steel with high tenacity PVC coated polyester fabric; alternative types of fabric are also available.
For further information, contact: Rubb Buildings Ltd, Team Valley Trading Estate, Gateshead, Tyne & Wear NE11 0QE.
Tel: +44 (0)191 482 2211
Fax: +44 (0)191 482 2516
Website: http://www.rubb.com

900 on AR enquiry card



Lignacite

Architects Marshall Haines & Barrow chose Green Shotblasted Apollo Architectural Facing Masonry by Lignacite for the new C. Brewer & Sons store in Redhill, Surrey. It is apt that as suppliers of paint and decorating materials that they should make a statement in green. The area in Redhill had no clear architectural style and the clients were keen to see a striking building of quality and low maintenance. This proved to be one of the key factors in nominating Lignacite as masonry supplier. Of special interest were the matching hand cast special shapes for the column and window features.
For further information telephone Barny Parks on +44 (0)1842 810678.

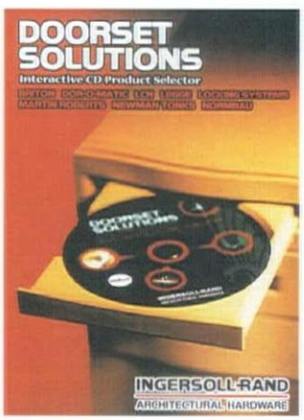
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Forbo-Nairn

A combination of Marmoleum Dual and Marmoleum Real was used to create a stunning effect in the refurbished cafeteria of Carmarthen Leisure Centre, South Wales. Bold wave designs in rich yellow and blues, all edged with ruby and a chequerboard pattern create a flow around the self-service counter and lead through to a bright seating area. Marmoleum is tough, durable, hygienic and easy to maintain.It is available in 2 metre wide sheet in 78 different colours, 2.5mm gauge and in 30 of these colours in 50 x 50cm tiles. Forbo-Nairn Ltd is based in Kirkcaldy and is the sole manufacturer of linoleum in the UK.
For further information telephone +44 (0)1592 643777.

902 on AR enquiry card



Ingersoll-Rand

The new updated interactive CD-ROM 'Door Set Solutions' from Ingersoll-Rand Architectural Hardware gives specifiers vast product information, including an extensive DXF library which will save hours of drawing time.
The new door set selector feature gives recommendations on the most appropriate ironmongery for a building application and allows specifiers to select a variety of doors and veneer finishes, helping clients to make decisions before the show board stage.
For further information please contact Kerit Parmar, Ingersoll-Rand Architectural Hardware, Wallows Lane, Walsall, West Midlands, WS1 4NA. Telephone +44 (0)1922 707400.

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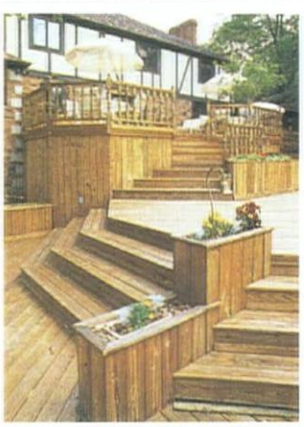


BUTLER®

Butler Cladding Systems

Butler MR24 – seen here on Microsoft UK's headquarters at Thames Valley Park designed by T. P. Bennett Partnership – is a lightweight, engineered roofing system comprising aluminium panels machine seamed together during installation turning the panel edges through 360°. The exclusive seaming process integrates sliding, non-panel penetrating clips which allow the entire roof to expand and contract naturally overcoming a major cause of failure in other systems.
For more information contact Martin Gaskill, Butler Cladding Systems, 1 The Parade, Lodge Drive, Culcheth, Warrington, Cheshire WA3 4ES.
Telephone +44 (0)1925 764 335
Fax +44 (0)1925 763 445

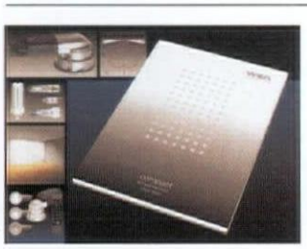
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The Outdoor Deck Company

The Outdoor Deck Company has introduced a unique service in the United Kingdom which offers quality deck boards and an in-house installation service. The company is the sole UK supplier of DuraPine® Outdoor Wood Select – a grade I Southern Yellow Pine – from Cox Lumber, one of the leading deck wood suppliers in the United States. This timber is covered by a 40 year guarantee against decay. Gazeboes, arbours and bird feeders are also available.
DuraPine® wood is available in a range of lumber grades and preservative retention levels and is used for many different applications. Telephone The Outdoor Deck Company on +44 (0)181 876 8464; fax +44 (0)181 878 8687.

905 on AR enquiry card



New WILA catalogue

'Compact', WILA's Compact Luminaire Catalogue covers WILA's extensive range of compact luminaires designed for compact light sources and features numerous developments including products in the E Connect family of luminaires, an extended range of wallwash downlights and compact luminaires for high-intensity discharge and tungsten halogen lamps. WILA's square luminaires range has been extended and includes wall luminaires with a recessed depth of as little as 80 mm. The catalogue also features a comprehensive Technical Appendix.
The catalogue can be ordered from: WILA Lighting. Telephone +44 (0)1235 813400; fax: +44 (0)1235 814433.

906 on AR enquiry card



Dulux Trade Colour Wheel

Dulux Trade has launched an innovative Colour Wheel designed to make colour design easier than ever. Used in conjunction with the Colour Palette fan deck, the new wheel enables specifiers to easily create colour schemes. With more than 1600 colours in the Colour Palette range the colour scheming possibilities are endless. The Colour Wheel is logical and easy to use. To obtain a harmonious colour scheme, based on adjacent shades in the colour circle, simply point the main arrow on the colour wheel to your chosen hue and use this in conjunction with the two hues shown in the windows on either side of the arrow.
To obtain a copy of the Dulux Trade Colour Wheel tel +44 (0)1753 691690.

907 on AR enquiry card

Specifier's information



BeoLab 4000

Loudspeakers usually conform to the 'black box tradition' – angular and unattractive. But the BeoLab 4000 active loudspeaker from Bang & Olufsen offers something different, combining powerful sound with sleek, compact dimensions and, unusually, colour. Originally available in silver, green or black, the BeoLab 4000 speakers now come in eye-catching blue, yellow and red. There is even a choice of coloured speaker front cloths that can be fitted in matching or contrasting shades. Due to its finned back, the speaker can be placed in almost endless positions: wall mounted vertically or horizontally, on a shelf, on the floor or hung from the ceiling. For your nearest Bang & Olufsen dealer, please call: +44 (0)118 969 2288.

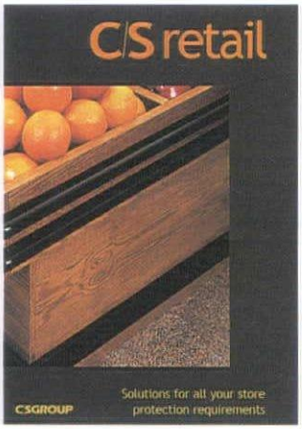
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EAG FireMaster

The Tottenham Hotspur Football Club recently brought a revolution in fire resistant glazing to their stadium when EAG FireMaster installed a 95 metre run of frameless intumescent butt-jointed Schott Pyran S glazing to the North Stand.
Previously, vision would have been partially obstructed by 3 inch wide mullions. Today, large panes of fire resisting glass can be butt-jointed together, resulting in uninterrupted vision. The EAG FireMaster 'butt-jointed' system provides 30 minutes fire integrity from the inside and weather integrity from the outside. For further information telephone +44 (0)1582 467111 or fax +44 (0)1582 769625.

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C/S Group retail brochure

The latest brochure from C/S Group has a unique range of protective bumpers and wall finishes for the retail sector. C/S Group is a leading manufacturer of specialist protective products for all interior and exterior store protection needs. The range includes crashrails, bollards, protection posts, bumper rails and protective wall sheeting designed to withstand the hard knocks and general abuse meted out by fork truck, trolleys and general wear and tear in warehouses and stores. The 6 page colour brochure has detailed product descriptions, their applications and the colour options. Contact Construction Specialties (UK) Ltd: tel +44 (0)1296 399700 or fax +44 (0)1296 399444.

910 on AR enquiry card



Thermoscreens

Whether for electrically heated, water heated or steam heated applications, for air-conditioned, cold store or deep freeze air spaces, the New Compact range can be supplied to best screen your valuable temperature controlled environment. A good example being the exposed T.K. Maxx site at Gateshead, where the problem of a cold north-easterly wind would normally mean that entrance doors are kept closed. Having installed a New Compact electrically heated air curtain over the main entrance, doors can be kept open to encourage vigorous trade. For more information or to talk to our technical support team tel: +44 (0)1703 254731; fax: +44 (0)1703266563/266413; email: info@thermoscreens-ltd.co.uk

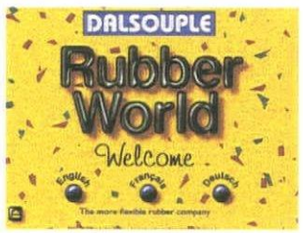
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Paula Rosa

One of Paula Rosa's most successful designs, Burlington Plus is a Shaker-style kitchen ideal for any contemporary home. Doors are available in agate (green), crackle yellow, grey squares, green polka or pear effect, with pear effect cabinetry. The finishing touches include a choice of matt nickel 'D' handles or anthracite grey bow handles or knobs, glass display doors and chrome wine rack. The result is a clean cut hard-wearing design. Paula Rosa has recently opened new regional trade offices and display rooms in Devizes, Wiltshire for the whole South-West and South Wales region. For more information telephone the Devizes showroom on +44 (0)1380 723538 or Head Office Trade Sales on +44 (0)1903 743322.

912 on AR enquiry card



Dalsouple Rubber World

Dalsouple rubber flooring has launched its new CD Rom design tool 'Rubber World', the first in flooring to be licensed by Pantone, Inc. You can access the full range of Pantone colours on screen to include in your flooring designs. Customized floor finishes in any combination of colours can be created in seconds. 'Rubber World' is dual format PC/Mac, trilingual (English/French/German) and free to specifiers.
Apart from its design flexibility, Dalsouple rubber is cigarette burn-resistant, anti-slip and anti-static. It is soft, warm, and tough enough for the heaviest traffic areas.
For further information telephone: +44 (0)1984 667233; fax: +44 (0)1984 667366.

913 on AR enquiry card



Wicanders Cork Master

The bold black minimalism of Coal from Wicanders Cork Master range epitomizes urban chic. Easy to lay, easy to clean and very resilient, the Cork Master range demonstrates that cork flooring is no longer limited to traditional woody tones. The collection includes subtle shades of green, blue, red, orange and grey to suit contemporary styles. As a stick down floor, Cork Master is designed to be glued to a solid, dry, level subfloor, and is suitable for most homes. Only Wicanders combines a genuine cork finish with a durable surface that needs minimal maintenance. The inner cork core makes it sound absorbent and pressure resistant. Tel: +44 (0)1403 710001; fax: +44 (0)1403 710003.

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Paragon

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Eco economy

GREEN BUILDINGS PAY

Edited by Brian Edwards. London: E. & F. N. Spon. 1998. £29.95

The idea that green buildings pay is definitely a worthy one, to be supported by worthy people and worthy buildings. As this book is the outcome of an architectural conference on the topic held in 1996, it is not surprising that it contains nothing revolutionary; it represents a consensus, and in my opinion the consensus is too timid. The daylight factors recommended are so low that electricity would inevitably be used during the day. Natural ventilation is agreed to be essential, but most clients and designers hedge their bets by including some mechanical ventilation and/or air conditioning, or the possibility of adding it later. The elimination of heating systems is not even on the agenda.

The only dissenting voice is Peter Smith: he points out that the 1987 Bruntland definition of sustainability is much too lax and that we should be aiming for more than a 60 per cent reduction in CO_2 emissions now. Of course if a more extreme position were taken, green buildings might not pay, and the cosy consensus between developers and architects would be broken. Designing green buildings requires engineering input, and this book makes no mention of engineers. New buildings, which represent a small proportion of the building stock, ought to be very much better as they set the trend for the next century. We must achieve much greater energy efficiency, and we should accept that some sacrifice is necessary. This book is a good record of the consensus in 1996, but it should not be seen as a model for today and certainly not for tomorrow.

MAX FORDHAM

Climate of opinion

ARCHITECTURE AND THE ENVIRONMENT: BIOCLIMATIC BUILDING DESIGN

By David Lloyd Jones. London: Laurence King. 1998. £45

The book serves as an excellent companion to another book by the same publisher, *Green Design: Design for the Environment* by Dorothy Mackenzie (1991). Together, these two books provide a good introduction for the designer or the layman reader into the fundamental principles and concerns in ecological design.

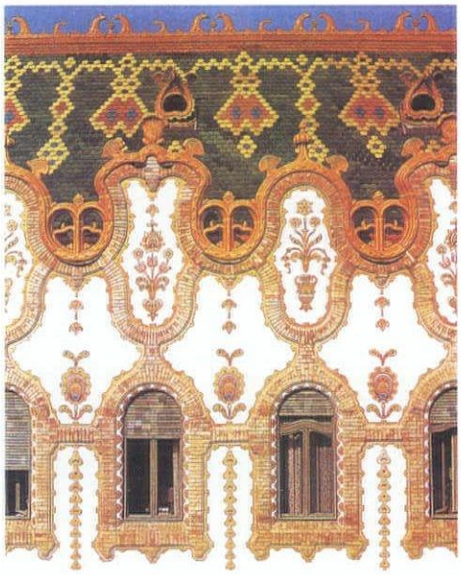
The book contains a brief historical review of bioclimatic design, but it is the project data section of the 43 buildings from different parts of the world that is the most useful aspect of the book. This section includes projects by some architects such as Tadao Ando, who are not generally associated with bioclimatic design.

The data section for each building enables the reader to compare the energy performances of the buildings although for some, these are not available in full.

In the appendix is a matrix of different passive low-energy strategies for different climatic zones. This is useful for the designer working in other climatic zones than the ones that they are familiar with.

The book is also well designed with a coloured tab at the edge of each page with pagination for easy access to different sections of the book. The book is recommended for architectural schools' libraries and those interested in bioclimatic design.

KEN YEANG



Ödön Lechner's Postal Savings Bank in Budapest was roughly contemporaneous with Wagner's in Vienna, but they could scarcely be more different. *The Architecture of Historic Hungary* (ed Dora Wiebenson and József Sisa, MIT Press, Cambridge and London, 1998, £32.50) sets Lechner's work in context in a vast and detailed sweep from the Romanesque to Imre Makovecz. Vital for any study of the country's highly idiosyncratic architecture.

Modernist pamphleteers

PAMPHLET ARCHITECTURE 1-10

Introductions by Steven Holl and William Stout. New York: Princeton Architectural Press. 1998. £25

In the late 1970s and early '80s, *Pamphlet Architecture* offered a fresh, samizdat-like alternative to homogenized architectural publishing. Based in New York and San Francisco, masterminded by a young Steven Holl and by bookshop innovator William Stout, the *Pamphlets* presented notional schemes by a then 30-something clique of intellectual practitioners, men – and one woman – who retained a critical faith in certain tenets of Modernism. Here the first 10 *Pamphlets* are reprinted as a celebratory, 20th anniversary tome.

Four of the *Pamphlets* contained projects by Holl ('Bridges', 'The Alphabetical City', 'Bridge of Houses', and 'Rural and Urban House Types') in which academic typology fused with a black-and-white, semi-Suprematist drawing style that characterized the architect's early career. Other contributions came from Mark Mack and Lars Lerup (both associated with Berkeley), Livio Dimitriu, Lebbeus Woods ('Einstein Tomb'), and Zaha Hadid. No 10 was devoted entirely to avant-gardist CIAM-member Alberto Sartoris (1901-1998) – as Holl says, a kind of grandfatherly figure to the *Pamphlet* crew.

Sartoris' text on 'Metafisica della Architettura' is wonderfully esoteric and there is a kind of madcap gaiety to several of the contributions. Then outside the magazine/monograph/catalogue establishment but now distributed by Princeton Architectural Press, the *Pamphlets* remain a role model for the independent circulation of ideas.

RAYMUND RYAN

Church service

CHURCH BUILDERS

By Edwin Heathcote and Iona Spens. London: Academy Editions. 1998. £45

The book is essentially in two parts – a historical survey, followed by a selection of contemporary churches.

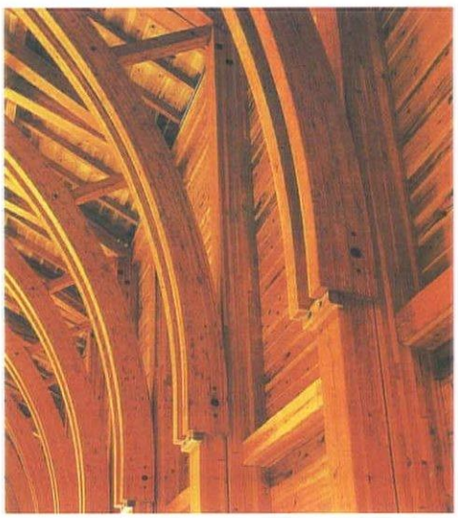
The first part is a wide-ranging essay by Edwin Heathcote, 'The Twentieth Century Church'. This review sets a context for the development of modern architecture and theology, and their evolution in both Europe and the US. This emergence is summarized as '... the synthesis of the pluralism of the turn of the century and the purity and clarity of The Modern Movement'.

This survey fulfils the author's basic objective to chart '... the fundamental upheavals in theological conceptions of the nature of worship and the space for ritual', and how these have become manifest in form, space and light. But, given the very large and complex nature of the subject, some of the most outstanding exemplars of change and architectural significance are treated somewhat equally with others of note, but lesser status.

For instance, Ronchamp and Aalto's Vuoksenniska warrant a more detailed critical analysis in both drawings and illustrations; and although architects such as Pietilä and Lewerentz are mentioned, their works are also not illustrated.

Essentially, the points of change and the resultant architecture, could be given more emphasis by defining them in more detail. However, the essay's overall content is an informed and thorough general history. Iona Spens' 'Movements of the Spirit' forms the second part of the book and fully illustrates some of the best contemporary examples of church architecture. A comparative and thematic critical analysis of the variants of spatial response, and plan/section typology, would enhance the overall presentation. Perhaps inevitably, there are some omissions, but the selection does include outstanding and very recent projects by Ando, Holl, Siza, Maki and Meier.

However, it is in the truly outstanding contribution by the Finns, for instance, the beautiful planar forms and light of Juha Leiviskä, that the processes of modernity are best demonstrated. The enduring simplicity and peace evoked in the Siren's Otaniemi Chapel, of 1957, remains a testament to these qualities as the central essentials of a modern Christian architecture, and sacred-space. IVOR RICHARDS



Roof structure of Hiroshi Naito's Sea Folk Museum, Mie Prefecture, Japan built with traditional skills and new technology. One of the many new and surprising buildings shown in *Pacific Edge* edited by Peter Zellner (Thames and Hudson, London, £32). Silly book design, often rubbishy writing, and perhaps preposterous proposition (that there is a coherent Pacific Rim approach) do not prevent pleasure from seeing many remarkable and little known buildings.

Italian centuries

STORIA DELL'ARCHITETTURA ITALIANA: IL QUATTROCENTO

Edited by Francesco Paolo Fiore. Milan: Electa. 1998. £80

IL SECONDO NOVECENTO

Edited by Francesco dal Co. Milan: Electa. 1997. £80

A new book series charting the wonderful development of Italian architecture across seven centuries is being realized by Electa. Two volumes have been released so far, and while they are currently available in Italian only, English versions will surely follow. Refreshingly, it avoids stylistic boundaries – such as Renaissance and Modern – and each volume is delimited more abstractly, by time, focusing on one whole or half century.

Commencing with Il Trecento (fourteenth century) the series concludes with Il Novecento (twentieth) which is divided into two separate volumes because of the breadth of material available. Thus, Il Secondo Novecento opens with disastrous flooding in Florence and Venice in the 1960s, though it more broadly covers the urban reconstruction of Italy post-war. Specialist authors then describe the architecture of Italy's major cities – Milan, Venice, Turin, etc – before turning to influential paper projects and their relationship to subsequent building practice. Later chapters are concerned with the changing role of the professional architect: attitudes towards restoration; and there are two chapters on museum and exhibition design, in which Carlo Scarpa figures prominently. There is a chapter too on those Italian architectural journals – *Domus*, *Casabella*, *Lotus International* and *Rassegna* – that have had significant impact domestically and internationally.

Il Quattrocento (fifteenth century), while equally handsome to look at, is less ambitious in its scope. It takes a more traditional art historical route through the century and, apart from opening chapters on Brunelleschi, and Alberti (by Howard Burns), is structured entirely by cities and regions, rather than ideas. Most fundamentally, it lacks a chapter on architectural treatises. Yet, as Burns writes, without Alberti's influential treatise 'there would not have been Palladio, the treatises on the orders, a theory of architecture and, probably, not a Modern Movement or a Le Corbusier'. ROBERT TAVERNOR

Jacobsen must

ARNE JACOBSEN

By Carsten Thau and Kjeld Vindum. Copenhagen: Arkitektens Forlag. 1998. DKr598

This is the big book (560 pages) on Arne Jacobsen which has been needed for a long time. It covers both life and buildings in detail (though perhaps it might have given more detail on the furniture of the most successful chair designer of the century – when did you last sit on one of his chairs?). All the buildings are illustrated, key ones copiously, from the romantic cottages of the late '20s, through the discovery of pure white architecture in the '30s and the marvellous humane flowering in the '40s and '50s in buildings like the Soholm housing and the Munkegård school, to the later, rather more austere international style – though even here he could have wonderfully tender moments, like the old orchid bar of the Royal Hotel, now barbarously destroyed (but shown here in evocative photographs).

Any Jacobsen fan will want the book. Unfortunately, the copious text is in Danish only. It must be translated. P.D.

Seminal Israel

TECHNOLOGY, PLACE AND ARCHITECTURE: THE JERUSALEM SEMINAR IN ARCHITECTURE

Edited by Kenneth Frampton. New York: Rizzoli. 1998. £25

In an enlightened gesture timed to celebrate the opening of the new Israeli Supreme Court Building, the Rothschild family foundation in Jerusalem, 'Yad HaNadiv', inaugurated in 1992 a series of biennial seminars which were intended to discuss issues of architecture in the public domain and to raise the standard of debate among the profession locally. The seminars were chaired first by Julian Beinart and Arthur Spector, and subsequently by Kenneth Frampton, and guest speakers included architects and academics of world reputation who gave formal lectures and participated in question and answer sessions. The first three seminars are recorded here in a volume edited by Frampton, which brings together the whole of the 1996 seminar and a highly edited selection of pieces drawn from the two previous events.

It is the wrong sort of book to give justice to the significance of the occasion: there is nothing of the atmosphere of the sessions themselves, which attracted Israeli architects in droves and were attended to bursting point. Instead of a dull format (admittedly adequately illustrated on the whole), we should have had photographs of the speakers in action, a record of the lively reception they received, local reaction, architectural, journalistic and critical response, and perhaps some reports from 'behind the scenes'. I remember Moneo, Giurgola and Correa speaking with tremendous charisma in 1992: their lectures are reduced here to a series of soundbites. The book is insufficiently distinguished from any of the other places where one can read architects talking about their own work, especially since here the advertised themes of the seminars were generally referred to only in passing during the lectures themselves. And, unforgivably, there is no index – a characteristic failing of Rizzoli publications.

TIMOTHY BRITTAIN-CATLIN

DELIGHT







Over its five hundred year life the Monte dei Paschi di Siena, one of Italy's leading banks, has acquired and maintained a highly enviable collection of stunning historic buildings.

Established in 1472 in the Tuscan city of Siena, the Monte dei Paschi di Siena started life as a pawnbroker and has now become one of Italy's leading banks. Located in the glorious Piazza Salimbeni in the heart of the city, the bank maintains its *sede* (headquarters) in the Palazzo Salimbeni (pictured top left), a fourteenth-century Gothic fortress, originally built for the bank's founding family. The complex is made up of three palazzi: the Palazzo Salimbeni, with its majestic tower, archives, halls and the finely frescoed Peruzzi gallery (bottom left); the Palazzo Spannocchi, housing grand halls and smaller chambers; and the Palazzo Tantuci, now used as one of the bank's public branches.

The palazzi have undergone two major restorations, in the late nineteeth century by the famous Sienese Gothic revivalist, Partini, and more recently in celebration of the bank's quincentenary in 1972, which included a staircase that spirals the tower of the Palazzo Salimbeni. The Monte dei Paschi's impressive list of historic real estate assets goes beyond Palazzo Salimbeni. Among others in the cities of Perugia, Pisa, Ravenna, Tivoli, Tarquina and Genoa is the finely decorated fifteenth-century Palazzo Orlandini del Beccuto in Florence (right), acquired by the bank earlier this century.

Throughout its life the bank has supported the urban development of Siena and has been an important patron of local architecture and the arts, acting as Siena's architectural caretaker. Under the watchful eye of the *Soprintendeze per i Beni Ambientli e Architettonici* (the locally based authority for historic buildings), all buildings must be kept in excellent condition and any restorative measures must adhere to strict laws that respect the original form. More recently, the increased impracticalities of cabling telecommunications through these old buildings have forced the inevitable move from some of the bank's historic headquarters in Siena, to two modern buildings just outside the city walls. Designed deliberately for maximum functional efficiency, this intentional polarization avoids a compromise in architectural styles and now leaves the Palazzo Salimbeni to revel in its uncompromised original splendour.

ELEANOR CURTIS

Photographs: Lensini Fabio