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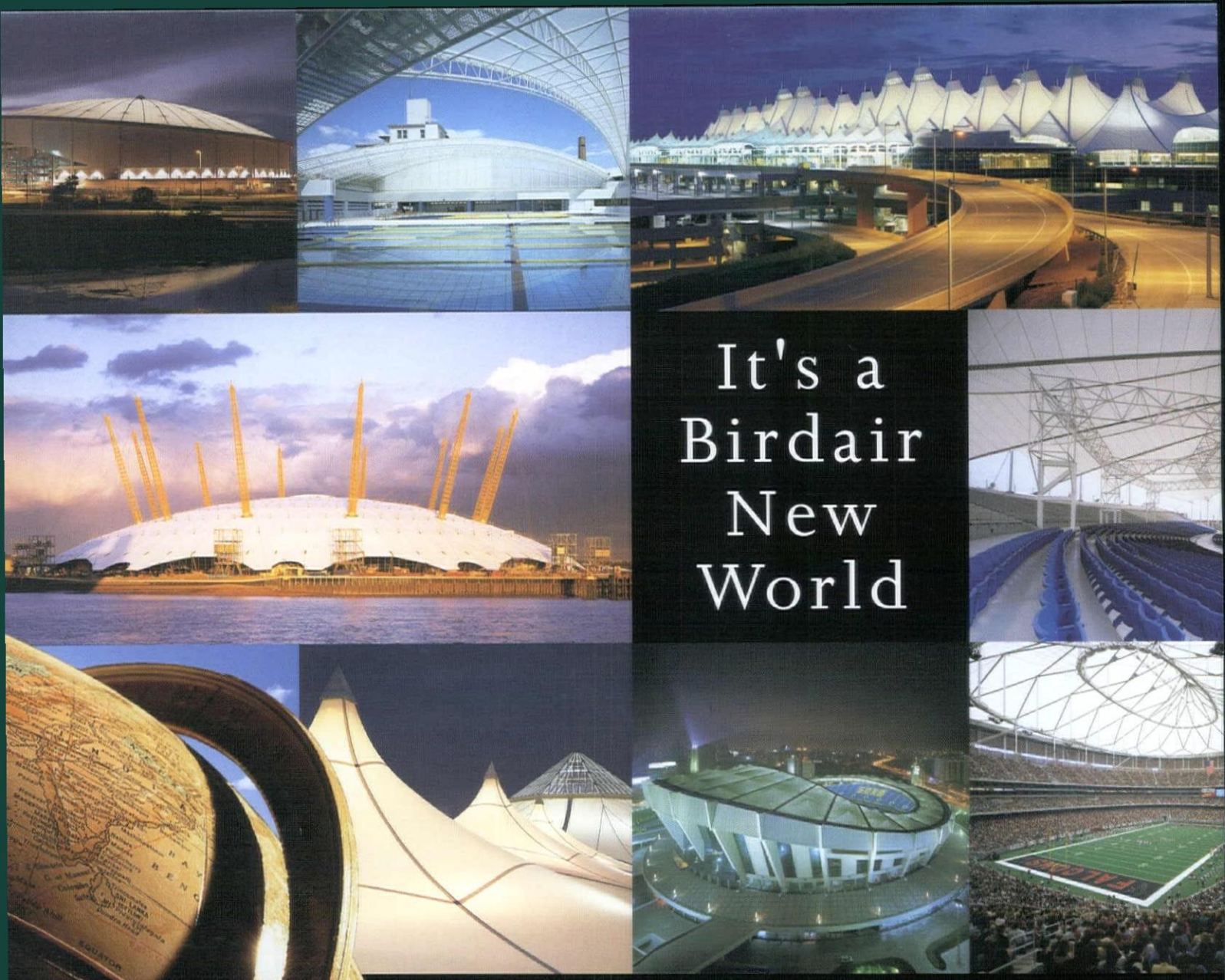
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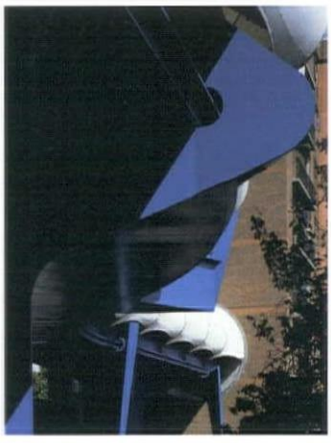
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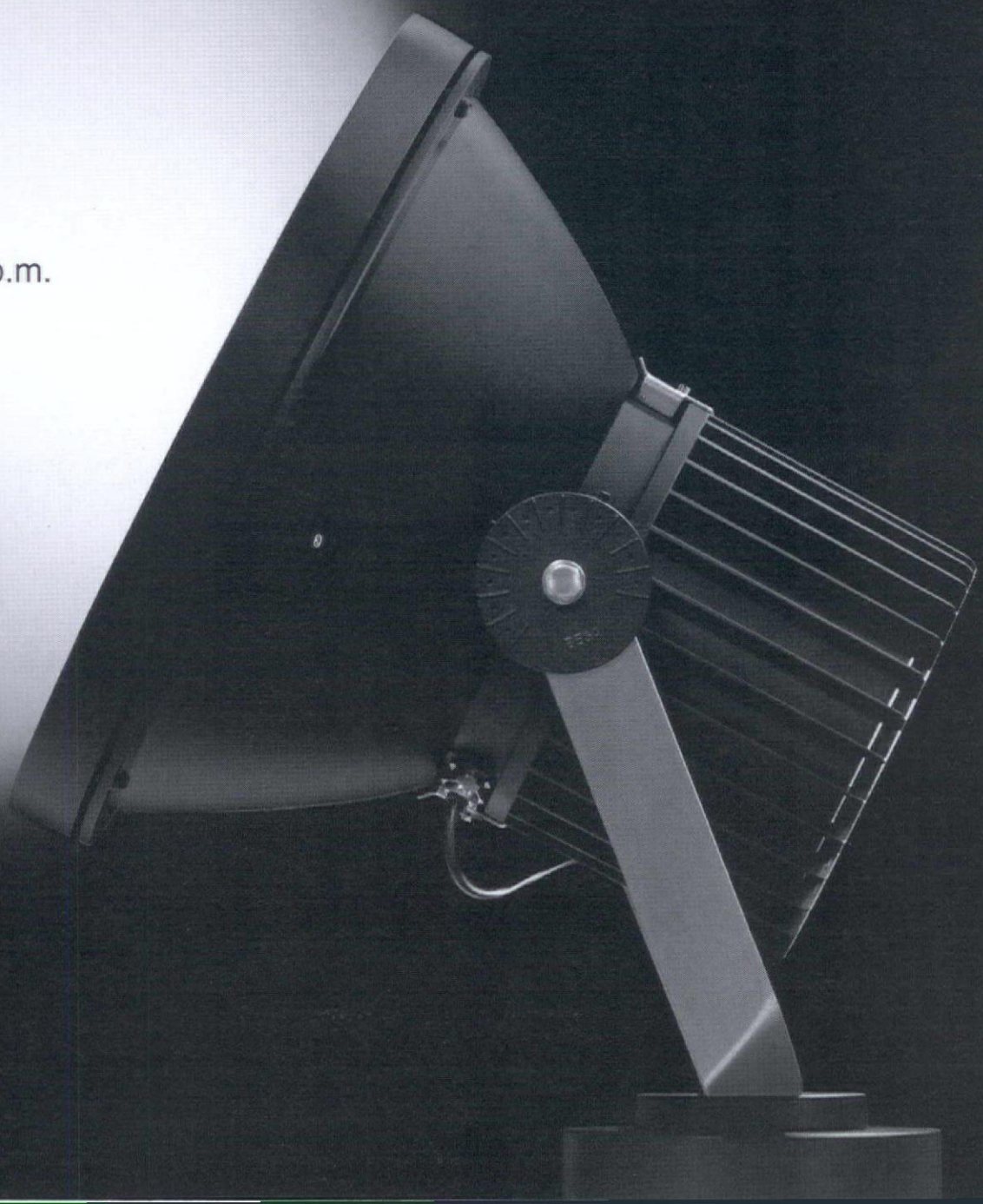
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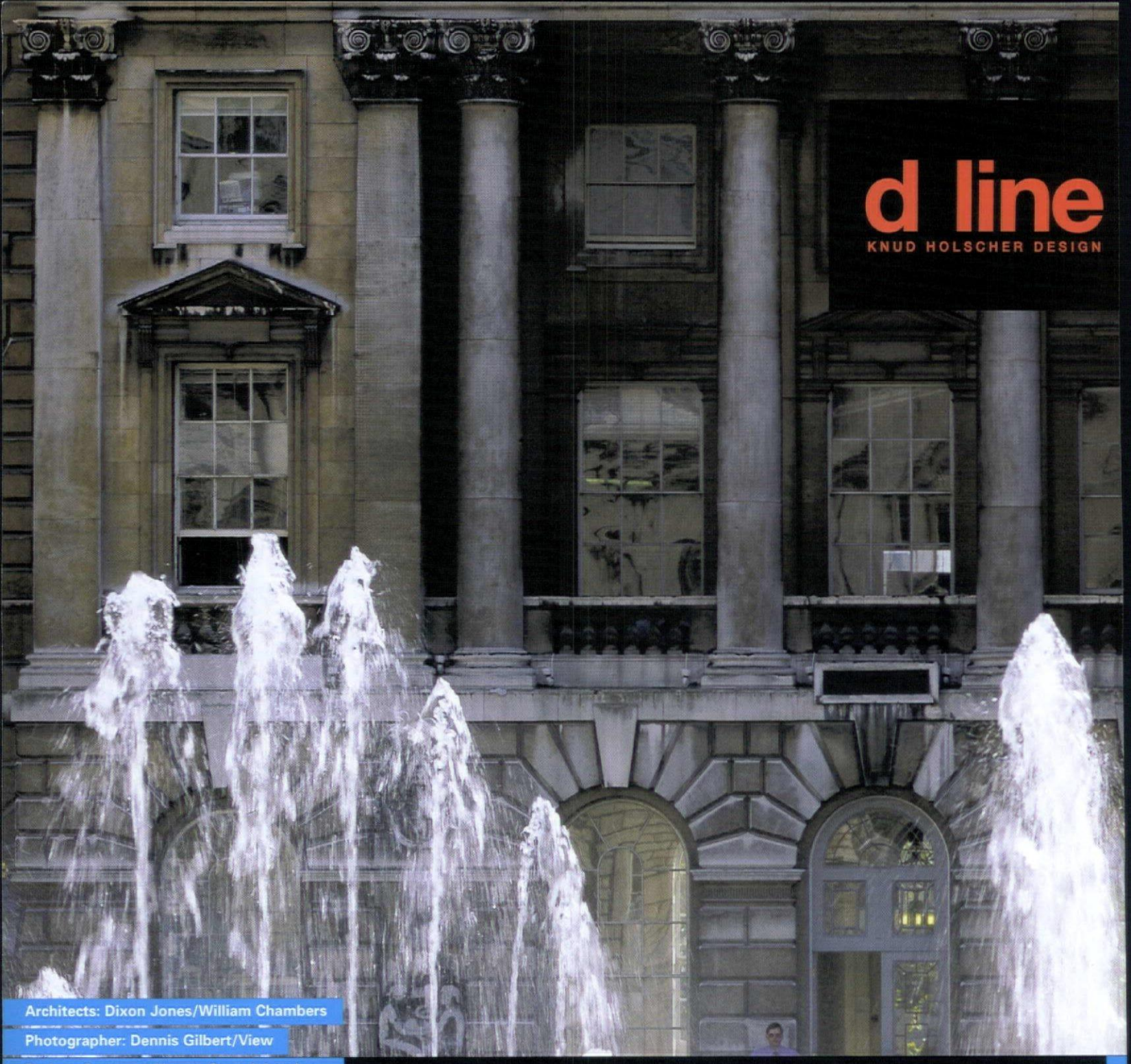
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Located in a newly developed area of Buenos Aires, Argentina, the Hilton Buenos Aires' contemporary design and observation elevators attract more than just guests. "The panoramic elevators are unique to Buenos Aires," said Mr. Tom Potter. "A lot of people come on the weekend to ride the elevators and see the hotel from a different angle. They have also been used for fashion photography for magazines." Apart from the interesting design, Mitsubishi Electric was chosen for its reputation. "In Latin America, Mitsubishi elevators are known for their reliability and their high quality of engineering." Guests comment on the speed and smoothness of the ride, but safety and service are paramount for the hotel. He counts on the famous brand name for, "first of all, excellent service and backup from Mitsubishi in Argentina. And reliability and longevity." Mr. Potter concluded, "We have eight guest elevators, plus four service elevators, plus escalators that transport guests four floors, so our business is very reliant on the good working order of all these different systems. We see Mitsubishi as a complement to our service delivery."



The elevator entrances double as windows on the lobby.



Four panoramic elevators serve the light-fille atrium.

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Hilton Buenos Aires: Unique Modern Design

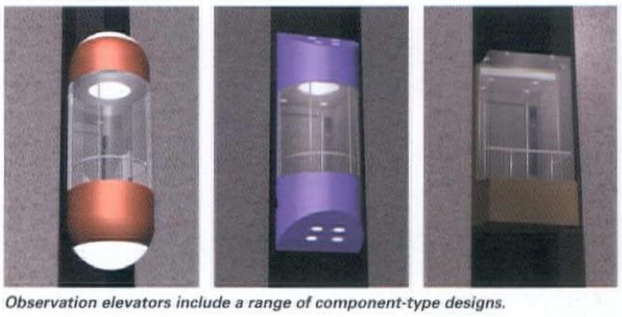
The Hilton Buenos Aires was designed by Mario Roberto ALVAREZ, one of the best-known architects in Argentina. The contemporary design hotel is located in the Puerto Madero district, a newly developed city area. Its nine floors above ground and two basement floors offer 50,000 sq. ft. of meeting facilities and 421 guest rooms. On any one day of the year the convention rooms host 3,000 people, while on a busy day. the hotel rooms accommodate about 450 guests. With its 4 panoramic elevators, the spectacular atrium lobby attracts photographers looking for a dramatic background for fashion shoots.



The atrium and its unique elevators are often used as dramatic backgrounds for fashion spreads.

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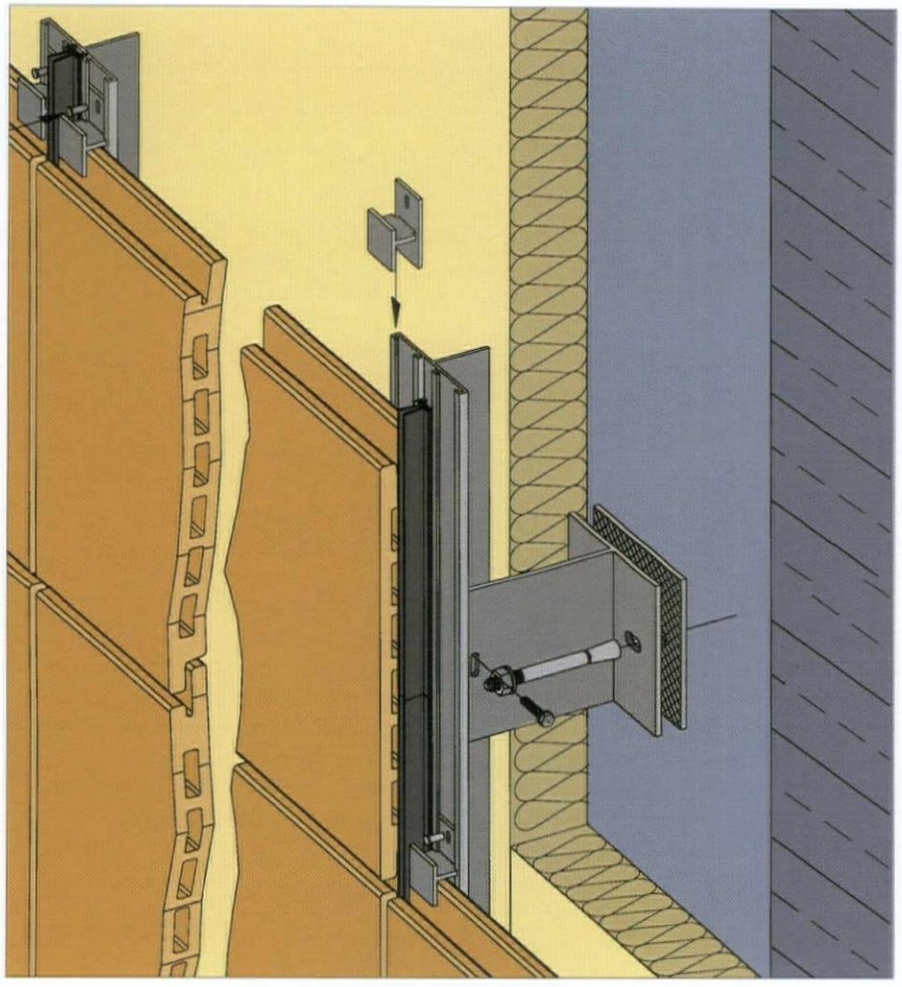
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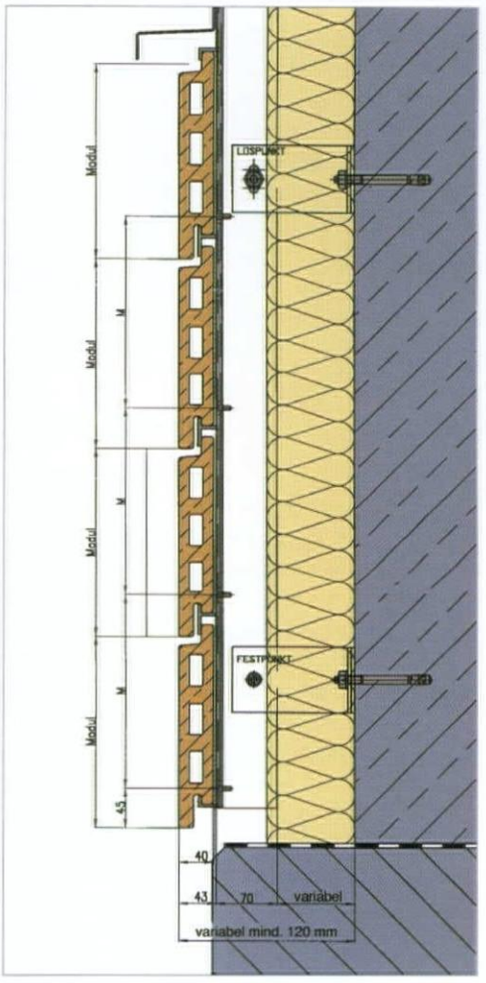
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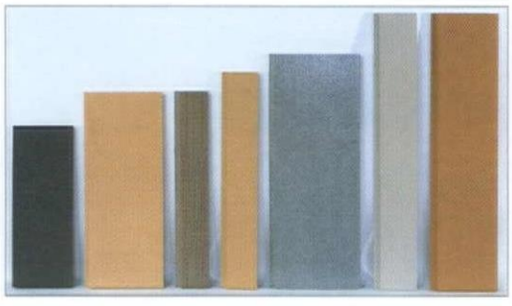
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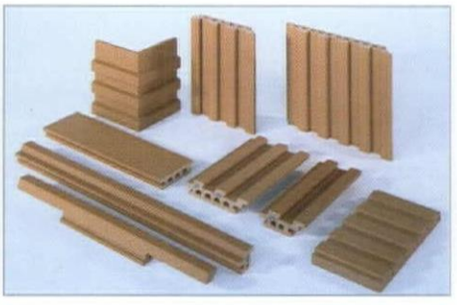
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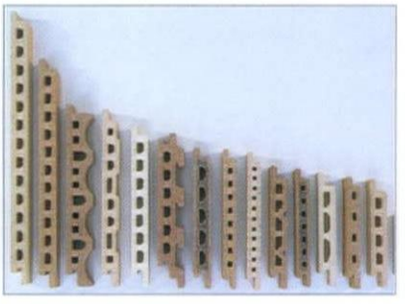
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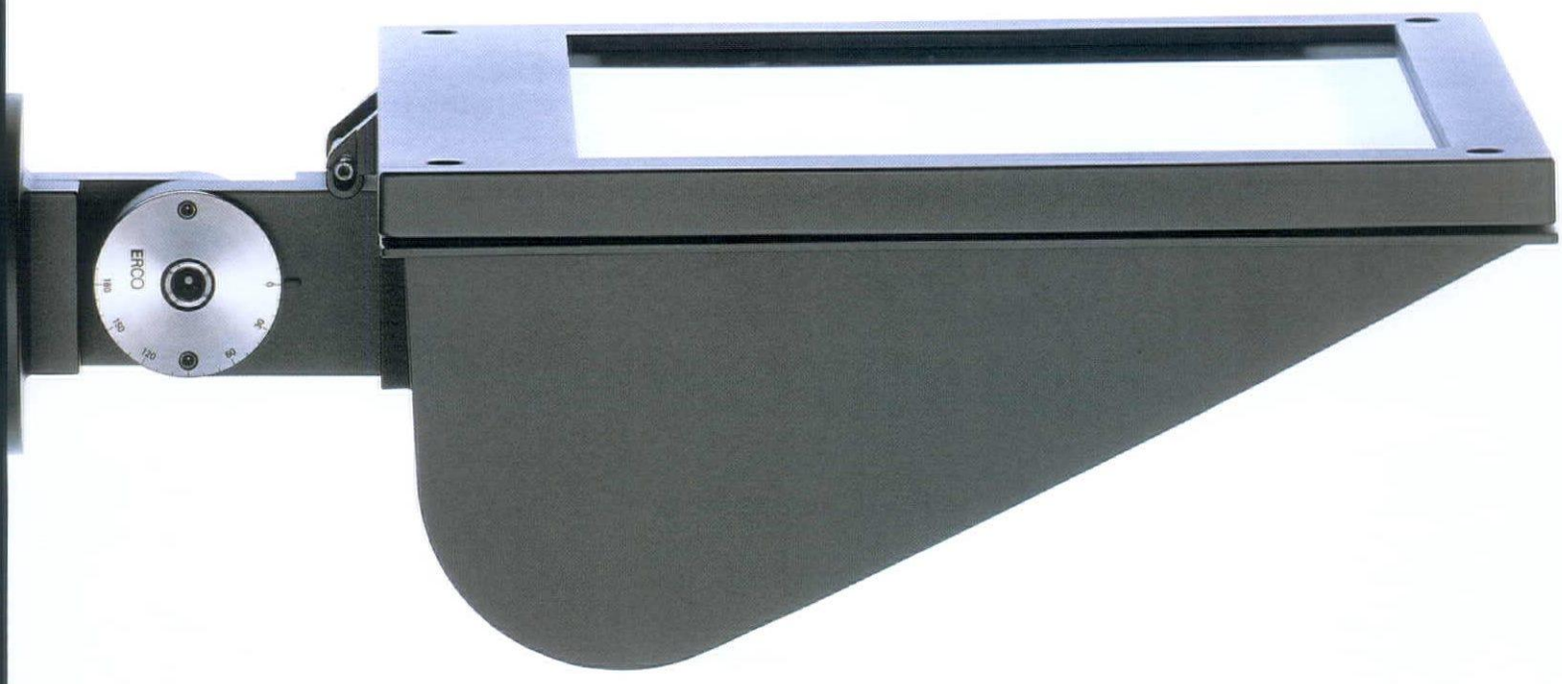


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view

JEAN NOUVEL CELEBRATES MIDDLE AGE BY CREATING A MYSTERIOUS MAZE IN THE POMPIDOU CENTRE. EARLY DEATH OF SAMUEL MOCKBEE, RADICAL AND BRAVE ARCHITECT TO AMERICA'S RURAL POOR. CENTENARY CELEBRATIONS OF ARNE JACOBSEN, CANONICAL DESIGNER OF MID TWENTIETH CENTURY. EMPTINESS OF ARTISTIC ENDEAVOUR.

JEAN NOUVEL STORMS POMPIDOU

There could be no better tonic for winter gloom than the unabashed, no-holds-barred celebration of Jean Nouvel's architecture on show until 4 March in Paris at the Pompidou Centre. Yet the exhibition has not been given star billing on the Pompidou Centre's Piazza frontage. Heads should roll.

A huge portrait photograph of Jean Nouvel has been placed in what might best be described as Beaubourg's level +6 arrivals and departures lounge, where the route to his exhibition is indicated by a line-up of video screens displaying the same talking head – Nouvel's – discoursing on six different themes. 'These images may not be kind, but they do show I am no longer a young architect', remarks the real-life Nouvel, 'young architects do not inspire much trust or confidence, so the idea here is to show what I have become'.

Perhaps taking his cue from turn-of-the-century Parisian brothels, Nouvel has transformed the 1100m top floor gallery space at his disposal into a sequence of enfolding, dimly-lit ambiences that pulsate with verve, warmth and *joie-de-vivre*. Once past the ticket check-point, visitors are plunged into near darkness. A very shiny black floor melts into black walls enlivened by illuminated bands of small colour slides: views of Nouvel buildings, arranged in no particular order, to illustrate the range and diversity of his built *oeuvre* to date, complemented by sequences of larger images projected very dimly overhead.

There follows a reddish labyrinth of recent projects : gynomorphic competition schemes for the Guggenheim temporary museum of art, Tokyo (2001) and for the Museum of Human Evolution, Burgos (2000), the overtly phallic Aguas tower, Barcelona (1999), more sober designs for the Richemont headquarters, Geneva (2001), a brash motorway-hugging complex for Brembo, Bergamo (1998) and the lyrical winning scheme for the future museum on Quai Branly, Paris (1999) among many others.

Nouvel's ideas for two urban design competitions he is particularly sore to have lost – Stade de France, Saint-Denis (1994) and Seine Rive Gauche, Paris (1993) – are presented, complete with sound effects, in what he describes as the exhibition's 'polemic spine' – a narrow, corridor-like space linking the two halves of the labyrinth and other exhibits.

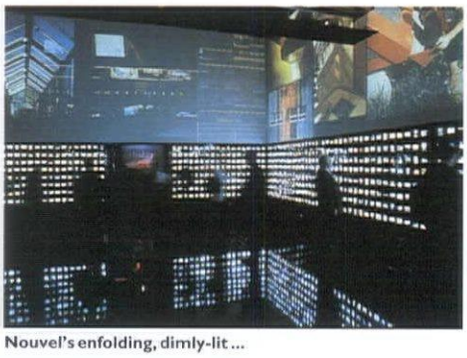
Nearly half the entire exhibition space is devoted to projecting stunning sequences of slides showing selected Nouvel buildings, or parts of them, almost full-size. There is plenty of space here to promenade or sit on the floor.

A little further on, the Nouvel office is evoked by a white-washed room equipped with tables, chairs and computer terminals giving access to all manner of information. Video explorations of completed buildings are on display here and the office personnel – which now includes language teachers – is represented by a rogues' gallery of mug-shots stretching all along one wall.

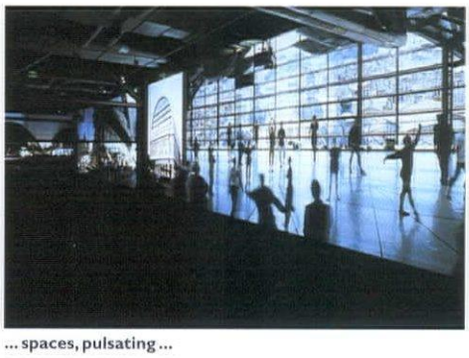
Sadly, these mug-shots are not reproduced in the exhibition catalogue (*Jean Nouvel*, Editions du Centre Pompidou, Paris, 2001, €37). It is a lavish piece of publishing – four sorts of paper, double and triple gatefolds, copious colour photographs and drawings – intended to provide a visual record of the exhibition. Texts are relegated to special narrow pages, so they are all the easier to ignore – a factor that probably makes this publication doubly attractive to architects.

As to Nouvel, he has already moved on. When last seen, he was presenting the French Secretary of State for Housing with a project for low-cost loose-fit houses with gardens in Mulhouse. Drawn up in conjunction with four other teams of architects – Shigeru Ban & Jean de Gastines; Anne Lacaton & Jean-Philippe Vassal; Duncan Lewis, Potin & Block; and Matthieu Poitevin – the scheme amounts to a manifesto for a more enlightened approach to subsidized housing in France.

CHARLOTTE ELLIS



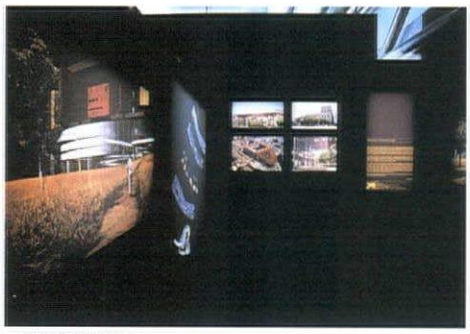
Nouvel's enfolding, dimly-lit ...



... spaces, pulsating ...



... with verve, warmth ...



... and *joie de vivre*.

obituary

SAMUEL MOCKBEE: AN APPRECIATION

It was with great sadness that we heard of the passing away of Samuel Mockbee on 30 December 2001. In an architectural age still obsessed by form and fashion, the work of Sambo was tragically under-represented in the media, with the notable exception of articles in The Architectural Review (AR March 2001).



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Mockbee's Rural Studio: challenging status quo and empowering the poorest.

His importance was better recognized outside the limited architectural world, with the award of a MacArthur Foundation 'genius' grant which, typically, he spent not on himself but on enabling others. His work had two strands. With his partner Coleman Cocker, he ran a practice in Mississippi which developed a modern vernacular sensitive to his home state. The second aspect of Sambo's work was as a teacher and enabler. In 1993 he founded the Rural Studio at Auburn University. This was a pioneering educational and architectural experiment, in which Sambo worked with his students among the rural underclass in Alabama. Together they designed and built an inspiring set of buildings on tiny budgets, driven by the imperative of the architect's social and political role in society. Sambo was clear in these intentions, saying that 'architects should always be in the initial critical decision-making position in order to challenge the power of the status quo'. The resulting architecture was far from the hair-shirt worthiness often associated with community initiatives. It was innovative spatially and technically, using and reinventing a whole range of everyday technologies and scavenged materials. Most importantly, it was entirely appropriate to the place and to the people who were to use it, creating a truly empowering environment. It is by any standards architecture of the highest quality; given the circumstances of its making it is really extraordinary. In years to come, it is likely that the work of the Rural Studio will be held up as an exemplar of how to respond to a world of diminishing resources and increasing poverty gaps. In its dialogue with the local, the architecture, as product and process, will also be seen as a pioneering counterpoint to the crushing homogeneity of globalization, a critical regionalism in the true sense of the word critical.

For the students, Sambo set the ambition that the experience would help them 'to be more sensitive to the power and promise of what they do, to be more concerned with the good effects of architecture rather than with "good intentions"'. As an educational model, this is truly radical, far surpassing the reactive demands of the profession for education to conform to the status quo. As an architectural model, it is equally radical, placing the architect at the heart of social issues rather than 'consigning them to problem-solving after the fact'. For us, Sambo was the most important architect and educator operating in the world; in his mixture of humility and aspirational ambition for others, he provided a role model that will be sorely missed. Who else could have said: 'Go above and beyond the call of a "smoothly functioning conscience"; help those who aren't likely to help you in return, and do so even if nobody is watching'?

JEREMY TILL AND SARAH WIGGLESWORTH

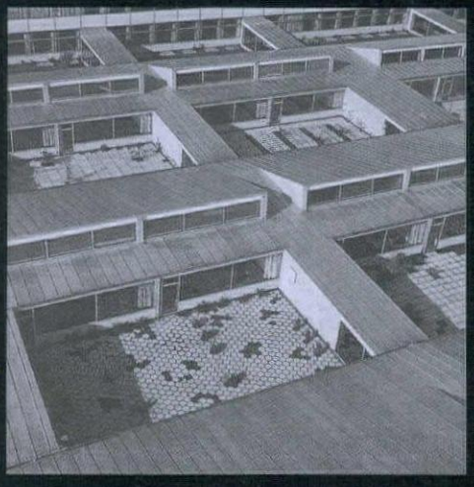
The quotes are taken from Samuel Mockbee's article, 'The Rural Studio', in 'The Everyday and Architecture', Architectural Design, *vol 68, July 1998.* Rural Studio; Samuel Mockbee and the Architecture of Decency *by Andrea Oppenheimer Dean will be published by Princeton Architectural Press in Spring 2002.*



Århus town hall (with Erik Møller). Competition-winning scheme 1937 – Asplund's influence is very clear.



Bellavista housing, Klampenborg (1934). Overlooking the Sound, the units were in echelons, each glimpsing the sea.



Munkegård elementary school, Søborg (1948-57). Combination of planning rigour and gentle courtyards.



Jacobsen's printed fabrics and wallpaper showed his tenderness to plants and his mastery of colour.

in which his door handles gently fit the hand to the construction of his curtain walls, which were both elegant and remarkably advanced constructionally. He was lucky to live in an age and society in which craftsmanship still flourished while industry was making a huge new range of materials and techniques available.

From his first large buildings, the town halls for Århus and Søllerød, the precision and luminance of his planning was clear, but as his housing complexes like pre-war Bellavista and the Søholm scheme started in the '40s,[4] his domestic planning could be both ingenious and most sensitive to human emotions. This sensibility was crossed with his rigorous handling of large buildings to create the Munkegård elementary school, in which every pair of classrooms had a private courtyard, each individually designed and planted. It is surely one of the finest post-war schools in the world.

Planting and gardens were lifelong preoccupations. Jacobsen's own garden at Søholm was possibly his best landscape: in which some 300 species were allowed to adopt their own habits, set off by linear clipped hedges and an orderly pattern of stone flags. A corollary to the landscape work was the fabric and wallpaper designs, based on the plant kingdom by Jacobsen (a brilliant watercolourist), made with great tenderness for nature and, at the same time, a thorough understanding of machine processes. Many of these were done in Sweden between 1943 and 1945 after Jacobsen, a Jew, had rowed in a small boat across the Sound to

CENTENARY CELEBRATION

Arne Jacobsen was one of the defining architects of the twentieth century. He translated the traditional Danish Classical sensitivity to the Modern age.

This is the centenary month of Arne Jacobsen's birth, and his lifework is celebrated in two exhibitions in Denmark,[1] and a new book.[2] The book's two authors, professors at the Danish Royal Academy, cover the whole extraordinary variety of Jacobsen's expression, and chronicle his life from the days when he went to America as a cabin boy on a liner to his final years as the grand old man of Danish architecture.

Jacobsen was one of the two Scandinavian Modernists most sensitive to the essence of materials and their handling. The other was Aalto, but he was essentially a Goth, while Jacobsen remained a Classicist from his earliest years as a student at the Royal Academy to his last works. While Aalto's inventions could be rough and even wild, Jacobsen's work was always exquisite, almost like a jeweller's both in proportions and execution. In many ways, he did not strive for the same goals as the Finn, whom he regarded as the only truly original talent in Scandinavian architecture.[3] In contrast, Jacobsen refined and polished ideas, often ones initiated by others.

But he was no mere stylist. From the moment in the late '20s when he embraced Modernism, Jacobsen showed himself to be an original manipulator of form, space and construction – though his debts for instance to Mies in many of the buildings are clear, and there are less obvious links to Eero Saarinen and Charles Eames in the furniture. He very quickly developed a mastery of detail, which can be seen in everything he did, from the way



The Ant Chair (1952): one of the great designs of the century, it spawned many offspring.

browser

Sutherland Lyall heroically surfs the architectural cyberwaves.

Artless art gallery

For some time exotically haired Bamber Gascoigne hasn't been seen presenting BBC's University Challenge. He's apparently been building the newly opened HistoryWorld website at www.historyworld.net – which is worth a look. More interesting for us is one of his favourite sites. It is a brilliant amateur art gallery by Denmark-based Carol Gerten-Jackson at www.hol.gr/cjackson/index.html. The type and design is a bit mimsy and the paintings tend to be dated before the end of the nineteenth century. But there are lots and lots of them, the scans are of high quality and the searching is wonderfully plain and simple using the well-tested clickable thumbnail approach. You imagine that the respected and ferocious web-usability guru, Jakob Nielsen, would approve.

Ictinus at last – and Callicrates too

Some sites we have looked at during the last few years have disappeared into the black hole of Cyberspace. But not the Digital Imaging Project at www.bluffton.edu/~sullivanm/. It's one of those sites initiated and run by real enthusiasts, in this case by Mary Ann Sullivan who teaches art history at Bluffton College, a Mennonite liberal arts college in Ohio. She says, 'I have received a number of e-mails from persons asking me why I am doing this'. And although she lets that hang unanswered you know it's because it's possible and because she feels she should. The project is a big and growing collection of images of architecture, art and sculpture from prehistory to now. Back in January 2000 we tried the Ictinus test and failed to find any reference to him or to Greek architecture. Now, happily, Iktinos and Kallikrates are at the head of the two pages to do with the Parthenon and its sculpture. So that's all right then. Except that for the lay visitor there is not necessarily a causal link between artists and building, there being no explanatory text. It's also still true that the heavy bias is in favour of US modern architects but, hey, it's an American site. Valuable in a different way is the link to http://www.links2go.com/topic/Picture_Collections which is a really comprehensive list of urls for digital image collections to which we'll surely come back.



Ictinus and Callicrates: Digital Imaging Project.

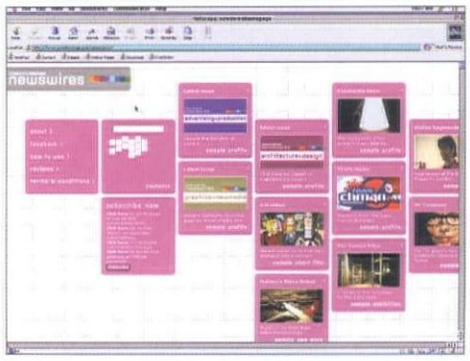
All's Will without Störmer

Will Alsop's site is still called http://www.alsopandstormer.com/ though the home page is titled the more up-to-date Alsop Architects and leads directly to a page featuring a shiny orangy amoeba shape. After a bit of experimenting with the mouse you click on one of the pseudopods and up pops a bit more orange blob surrounded by the names of projects relevant to the pseudopod's special theme: Working, BIG architecture, Moving and so on. One of several even smaller blobs adjacent leads to a bunch of thumbnail movies and another to an A to Z section illustrating projects. Then the tricksy bit. You run the cursor across the top edge of the amoeba and it suddenly serrates and when you click on the newly formed word 'practice' there is a black screen and a random array of ostensibly meaningless shapes – icons, I guess. You click on the elephant and there is a series of pensées – most of them originally published in our sister weekly magazine, *The Architects' Journal*.

Other icons lead to photos of the Alsop studio, the staff, the master at work on an action painting involving thrown paint and somebody's wall, management procedures and the office design approach which is called just that and not, praise the lord, 'practice philosophy'. Alsop, who models himself on Cedric Price (there are hints too of the clipped, understated delivery of the late, great engineer Frank Newby) actually has something interesting to say – bit like his architecture. Despite the apparent visual randomness, this site is simple, easily navigated and un-tricksy – and eschews the self-important pomp of rather too many contemporary architectural sites.

All hands to the pocket

One of the best newish sites for design and architecture and related topics has to be that of Creativebase: www.creativebase.com/newswires/. Fresh, wide ranging and well written, the bad news is that it has just converted into a paid subscription service. What you get every three



Creativebase: one of the best.

weeks is a 'wire' edited by Steve Hare to do with architecture and design. The 16 issues – or wires – in each year cost £75. On the evidence of a recent sample, it could just be reasonable value for money though I've got a feeling that using the price of print magazines as a basis won't necessarily wash – especially when there plainly aren't any printing and distribution costs. Still there is a cumulative archive – although everybody has these nowadays – including us at www.arplus.com.

Virtual 3D

One of the most interesting links in Hare's wire was to Simon Greenwold's Installation, research work he is doing at the Aesthetics and Computation Group at the MIT Media Lab run by the legendary John Maeda, 'Installation is a system consisting of a viewing window and a stylus with which users can create virtual forms and install them permanently into a real space'. See the full story and a movie at http://acg.media.mit.edu/people/simong/ and don't miss the whole site at http://acg.media.mit.edu/. You only wish Britain's Royal College of Art at www.rca.ac.uk/ bothered to do something even a tenth as good.

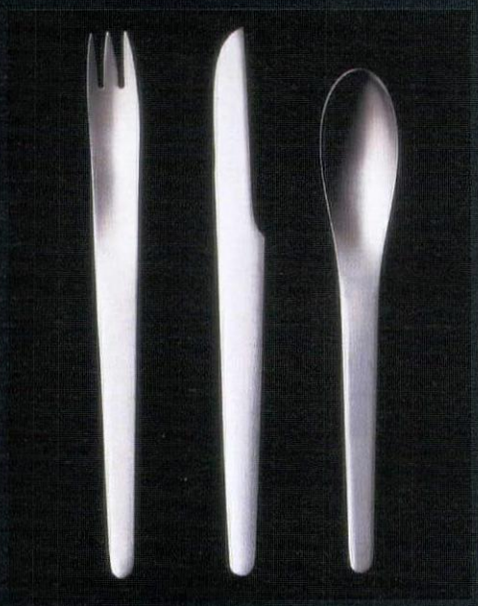
All quiet

Revisiting sites reviewed several years ago in this column I have to report that Agram www.bk.tudelft.nl/d-arch/agram/ which had been given warm approval by, among others, Kenneth Frampton and had been given an award for the best architectural website in 1997, is still a detailed database of the work of seven famous architects and has sadly been quiescent since March last year, the date, presumably for its Link of the Week to Brazilian architect João Batista Vilanova Artigas at www.sectionweb.com/eg/lnkw-fr.htm. Begun bravely, you hope somebody will cheer it up this year.

Sutherland Lyall is at sutherland.lyall@btinternet.com



Lobby of the SAS Royal Hotel in its heyday (1960) with Egg chairs and the (now destroyed) Orchid Bar beyond shimmering curtains.



AJ cutlery: Jacobsen thought that good design was educational, improving all society by example.

escape the impending extension of the Nazi Holocaust to Denmark.

Some of the later work is less well regarded now than it was immediately after Jacobsen's death in 1971. That amazing Modernist *Gesamtkunstwerk*, the SAS hotel has been very badly treated over the years, with the destruction of the famous Orchid Bar and bad refurbishment and refitting (not just because many who dined there tried to secrete pieces of its specially designed cutlery into their sleeves). The National Bank, Jacobsen's last major work, is a forbidding, if elegant, piece of urbanism, perhaps a Modern echo of C. F. Hansen or Hack Kampmann's Classical period. But St Catherine's, Oxford, completed with equal geometric rigour in the mid '60s, remains genial and collegiate, and still retains its original furniture.

Most of Jacobsen's chairs have never been out of fashion – though sometimes out of production – from the Ant of 1952 to the late works of the '60s. In designing furniture Jacobsen was almost yet another person, using flowing organic forms in complete contrast to the Euclidean rigour of the buildings. Again, the process of constant refinement is made clear in Thau and Vindum's book, a tribute to an architect which has very rarely been rivalled in one volume. The text (if sometimes slightly waffly) has been translated into workmanlike American, and analysis of design development of the major works is both revealing and touching.

PETER DAVEY

1 The first, Evergreens and Nevergreens, *is on his product design and opens at the Danish Design Centre, Copenhagen on 11 February. The second, more widely ranging one will be at the wonderful Louisiana Museum in the autumn.*

2 Jacobsen, *by Carsten Thau, and Kjeld Vindum, Arkitektens Forlag, Copenhagen, DKK 598.*

3 He later added Utzon.

4 He lived in it himself and had his office-studio there.

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outrage

EMPTY GESTURES

Art adores a vacuum, because a vacuum sucks in the media. If you really want press coverage nowadays you should follow the example of Martin Creed, winner of last year's Turner Prize (Britain's most prestigious contemporary art award, given at the Tate Gallery). Creed's most extreme exhibit was an empty gallery in which the lights flashed off and on. This was admirable as far as it went. But why should it stop there? Why not leave the lights on all the time? Or switch them all off? And why draw the line at a single gallery? Instead of an empty gallery at the Tate, why not an empty Tate Gallery?

And I do mean empty. Piles of bricks are too eye-catching; blank canvases much too self-assertive; what is required is nothing short of nothing at all. Then you can sit back and wait for the media response. It will not be long coming. Soon you will be praised for your economy of style, your reticence, your fluidity, but also for your impudence and your challenging sense of fun. And you will be praised for your integrity too.

If you do not believe me you should visit the exhibition of the work of The Three (at the Percy Miller Gallery, London by appointment) because these and other critical plaudits are all pinned up on the wall. In fact, the media response to the exhibition is this exhibition since The Three are not artists in the conventional sense at all. Like lawn-mowers, they create nothing but cuttings. Close examination of these cuttings reveals that many of them have been generated by New York based art critic Adrian Dannatt. He discovered The Three (by picking them out of a model agents' directory) and will cheerfully replace them with three more if he wishes. And if you sense a hoax, Bruno Hatt style, you would be right; but only half right. Art, as Marshall McLuhan observed, is anything you can get away with, but Dannatt is perfectly open about his aims. Contemporary art is now almost meaningless without an explanatory text and much of it is quite heavily textual in its own right.

The ensuing critical response (conducted entirely in words), is much more widespread and influential than the work of art itself. So Dannatt has merely done away with the work of art, and presented us with the discourse. He has created an Alice in Wonderland world in which artists 'communicate nothing but the results of their own communication strategies'. Ruskin, were he alive, might accuse Dannatt of flinging a pot of paint into the face of the public – but he would be wrong. Paint does not come into it. ALASTAIR BEST

letters

CONNECTING CRITICALITY

SIR: There is a connectivity between Glasgow, Dublin, and Lisbon, not only in myth, which may offer a response to Kenneth Frampton's idea of Critical Regionalism.

Attending the perennially excellent Royal Institute of Architects of Ireland's annual conference, last year in Lisbon, was my first visit to the city. Portuguese architects and planners graciously lectured on the history of the country, the city and their place in European architecture. It was left to a young architect from Porto to outline the contemporary scene in Portugal. From the post-war radicalism of a young Alvaro Siza to the creative blend of old and new in the work of Eduardo Souto de Moura in Porto and the fine emerging architects who seem to gravitate towards these two masters. As a consequence Porto rather than Lisbon seems particularly rich in new architecture.

Vittorio Gregotti's massive Belem Cultural Centre in Lisbon (AR January 1998), though rich in regeneration potential for a neglected part of the city demands an appreciation of culture rather than permitting us to engage and seems at odds with the open nature of much of the new work such as Paula Santos' archaeological site welcome centre or Christina Guedes' café on Estiva.

Lisbon lies on a latitude approximating Athens and Ankara with a population rich in Arab and African origins – six flights per day to Casablanca. Yet this rich, mature contemporary modernism has more in common with Dublin or Glasgow – a basis in the architecture of Helsinki or Los Angeles or Tokyo as much as in its own history. Changes in economy and technology are, contrary to Peter Davey's assertions, a one-way street. Offering opportunities for a new response, but rather than emphasizing regional and cultural differences they act as environmental attenuators. Smoothing out an indigenous response. Architecture is no longer at the mercy of a specific economy, topography or climate. Even Ken Yeang is exportable.

By any millennial timescale, the third could have been said to begin on 11 September 2001. Proof, if it were needed, that certain cultural values are no longer indigenous but international, if not global. Information networks and virtual images ensure influences from across the planet. However, this is not a cybernetic revolution. In architecture, the Athens Charter of 1932 was drafted to ensure, through CIAM, a thoroughly European cultural mix. A concensus architecture, at least among architects.

Further, if we look at critical points in cultural development – Finland under Russian occupation, or Spain as the restoration of parliamentary monarchy produced a political background sound enough for the final impulse toward modernity – inward looking reference points were essential to ensure the preservation of the culture which was under threat of eradication. Nowhere more so than in Portugal where architects have a conviction that until the 'spring' of Marcelo Caetano the Bau Polizei conditioned the style of architecture to the regime.

With autonomy comes a self-confidence which finds a strength in the past but consigns it to its rightful place – in the past; and then looks forward and outward to influences from Europe and beyond. Whether Aalto in the 1930s or Miralles in the 1980s. Climate, topography, and context will always be there but architecture has to be a manifestation of something more. This is the connectivity.

Regionalism in its true sense, as Frampton defined it, now exists only where architecture is absolute – a battle for supremacy over context, climate and topography and where it is reliant on these for its birth. The Aga Khan awards in this sense illustrate regionalism at its finest.

Yours etc

GORDON C. MURRAY

Glasgow, Scotland

JUST SHOWING OFF?

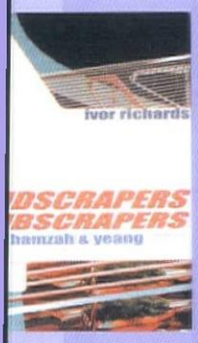
SIR: At school there was a particularly unpopular boy who when trying to curry favour or make new friends would expose his genitals in the playground. It wasn't big and it wasn't clever.

While Sarah Wigglesworth may be anatomically unable to repeat the boy's act, she and Jeremy Till have however managed an architectural equivalent (AR January, pp64-68).

By clearly striving for sensationalism they have produced their own peculiar brand of masturbatory architecture. This self-satisfying offering does not deserve to share the same binding as the finely crafted and truly creative architecture all too infrequently featured in AR January. That it should appear in an issue devoted to ecological matters is frankly bizarre.

Any building which encourages the critic to make references to the dark days of post-modernism is to be despised. There are no architectural jokes. The only occasions at which I have laughed aloud in response to any architectural offering is when the results are so pathetically poor it seems to be the only reasonable response.

Building for a Sustainable Future



Groundscrapers and Subscrapers

of hamzah & yeang

Professor Ivor Richards

Groundscrapers examines Yeang's low-rise, medium-rise and master-planning work, and sets these in the context of other work being created around the world. Illustrated throughout in colour, it includes many themes that demonstrate this way of building, as well as a subterranean project - an underground 'skyscraper'.

In this new departure he transfers his skills in vertical building into the horizontal and demonstrates what can be achieved by integrating the ecosystem into the building along the ground. Groundscrapers will be the first book to document his transferral of type and to demonstrate the huge contribution it represents to the ecosystem.

0-470-84354-3 £34.95 Pbk 304pp Dec 2001

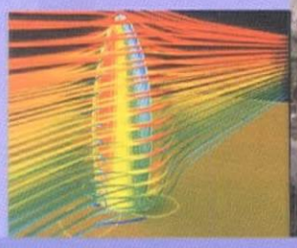


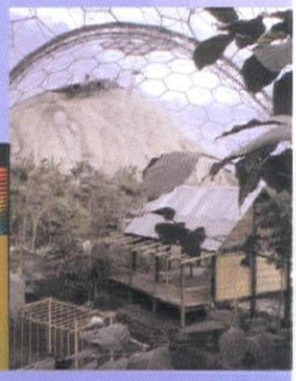
Sustaining Architecture in the Anti-Machine Age

Ian Abley and James Heartfield

Sustainability is a key issue in architecture today - this will be the first book to relate sustainability directly to commercial development, providing a practical guide to how to work within environmental restrictions yet create financially viable and attractive buildings. The authors discuss a wide range of building options from high-density housing to dispersed village settlements, and from traditional methods to high technology. With contributions from a wide range of architects, journalists and academics including Lord Richard Rogers and Martin Pawley, it provides an unbiased account of all aspects of this issue.

0-471-48660-4 £19.99 Pbk 208pp Dec 2001





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Campus armchair with laptop worksurface
Design Peter Hiort-Lorenzen & Johannes Foersom

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view

I'm sure Terry Farrell's egg cups keep him awake until late in the night as I hope the failed gabions, knackered shuttering ply and burst sacks at No. 9 Stock Orchard Street will haunt Wigglesworth and the eccentric professor for some time to come. Thank God they have to live with it.

My heart sinks when I learn that the building has already been listed as a contender for this year's building of the year. It wouldn't surprise me if the slags and the slappers of the RIBA got themselves in on 'the joke' (as the AR has) and dished out the gong at this year's freak show.

Yours etc
SHONA MORDAK
Lincolnshire, England

TRANSKEI TRAVESTY

SIR: As a South African architectural practice, we subscribe to the AR and await each edition eagerly. It is truly informative and a showcase for innovative design solutions around the world. Something irked me however when I read an article about the Museum at Mvezo at South Africa (AR November 2001, p44).

I've been to the buildings and found them truly publish-worthy. My gripe is with the description of Transkei as being one of the hated *bantustans*. I've lived on the border of the Transkei my whole life and have never heard the word *bantustans* used, nor was the Transkei a hated place. Most of the folks I grew up with (myself included) spent a big portion of their holidays in the Transkei, and owned property there on a tribal land scheme. We speak the local language and respect the cultures.

The Transkei was a homeland which failed to develop along with the rest of the country. It has many, many enormous problems, but I cannot perceive that it was hated, on any level except by an extreme few. The concept of separate development as proposed by apartheid regime and implemented in the form of homelands, was unacceptable, but that does not translate into a hatred of place. The people who originate in the Transkei are truly an independent culture, and I am sure have a sense of pride and belonging. The Transkei in particular was not a place people were forced to move to – they lived there and always had. The Mvezo Museum is just one small example of the commitment that is being shown by the new regime to developing this area. For many South Africans and International tourists the Transkei, and particularly the Wild Coast, is one of the most pristine and beautiful areas. This asset, now the region's most valuable, paradoxically comes from being underdeveloped for many years. Unfortunately the region has a very high crime rate which prevents it from reaching its full potential, but this is a different discussion.

It's just semantics at the end of the day, but I don't think it right to present the place in that way. I can't tell from the article who supposedly hated the place – whites, blacks, both? It wasn't like that and it's unfair to make sweeping statements which account for a whole nation or group. There's always more to it than meets the eye. An architectural magazine is perhaps not the place to launch a political debate, although the buildings featured in it may well do this in their own right.

All this said, I am proud to today be working in this area, on reconstruction and development projects, righting the wrongs of the past.

Yours etc
URSULA SKELLERN-GOUWS
Toi Skellern Architects, Uvongo, KwaZulu-Natal, South Africa

AR+D BUT WHERE EMERGING?

SIR: Congratulations for a wonderful issue! (AR December 2001). Fantastic and inspiring works. What struck me is the fact that there are no projects from the United States featured in the above mentioned issue. What does it say about 'emerging architecture' in the US?

Yours etc
DROR BALDINGER
San Antonio, Texas, USA

editorial notice

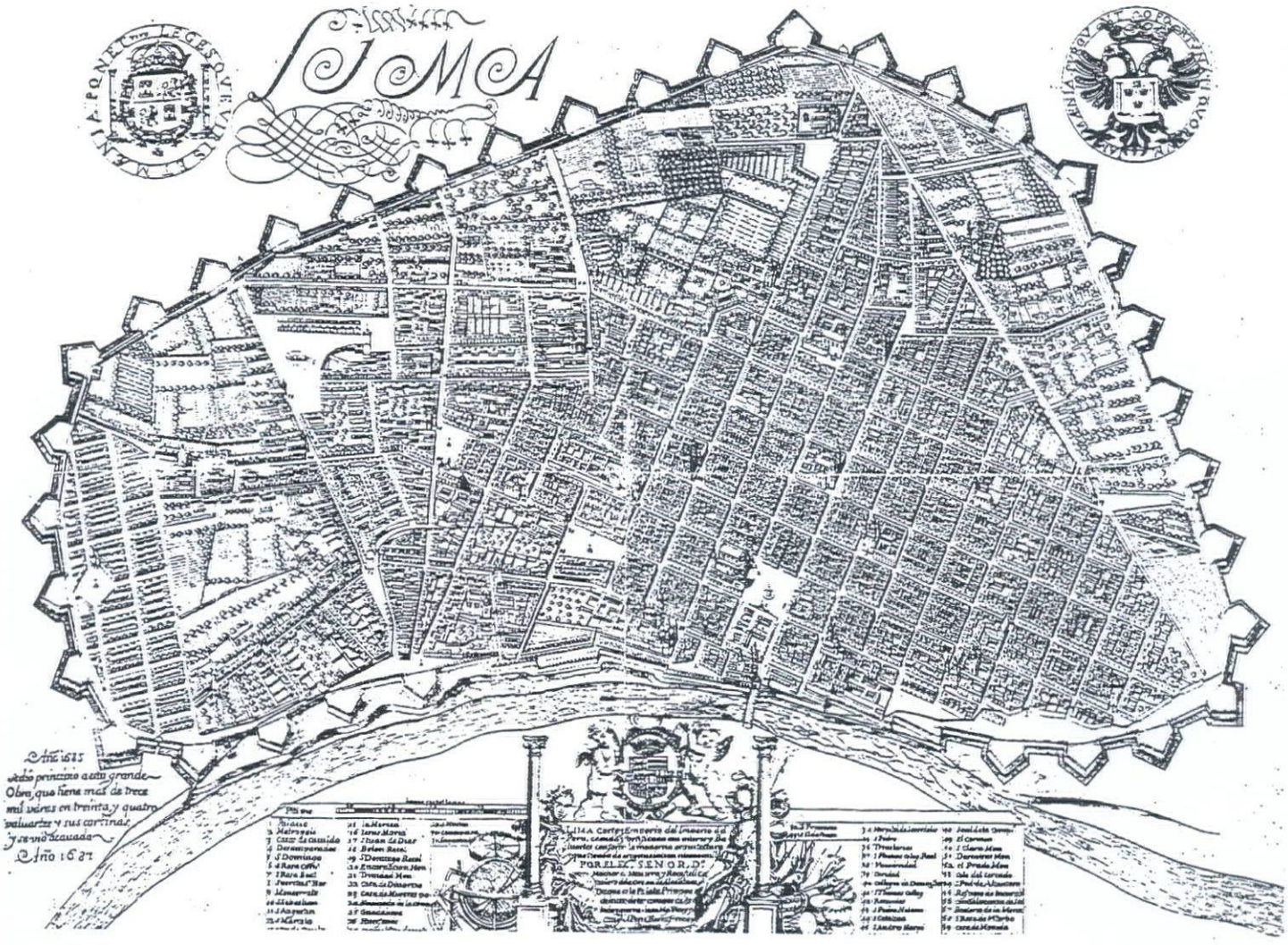
ELECTRONIC IMAGES

We are sorry to say that we can accept electronic photographs for publication in the AR only in the most exceptional circumstances. At the moment, even the best available technology does not allow us to assess, manipulate and check them properly. Electronic images do not reproduce on paper as well as conventional ones.

Electronic versions of drawings are usually rather easier for us to use. But like digitized photographs, they are much more time-consuming to work with than work on paper, transparencies or prints. We shall of course be happy to look at photographs and drawings as paper prints for purposes of selection.

erratum

The photo credit for mixed development in Hamburg (AR January 2002, p38) should read: 1, 2, 5 by Cordelia Ewerth; 3, 6, 7, 8 by Dirk Robbers/artur.



Plan of Lima in 1687. The conquerors' grid contrasts with irregular Indian settlements.

View from Lima

The capital of Peru, Lima was once a city that lived in contented harmony with its strange ecology and landscape. But now it has gluttonously devoured much of what made the city work.

Among contemporary Third World cities, Lima may be a case to show how the fierce process of contemporary urbanization has infused irrationality into what, until half a century ago, had proven to be, for over four hundred years, a town that had experienced growth harmoniously and organically. Founded by Francisco Pizarro, the Spanish Conqueror of the Inca Empire in 1535, its urban origins were the outcome of the rational application of the Renaissance principles that the Spanish Crown adopted brilliantly for the layout of new cities. These had to be scattered throughout the New World in order to ground swiftly and efficiently the spectacular process of colonization that quickly led to the appropriation of its vast American domains.

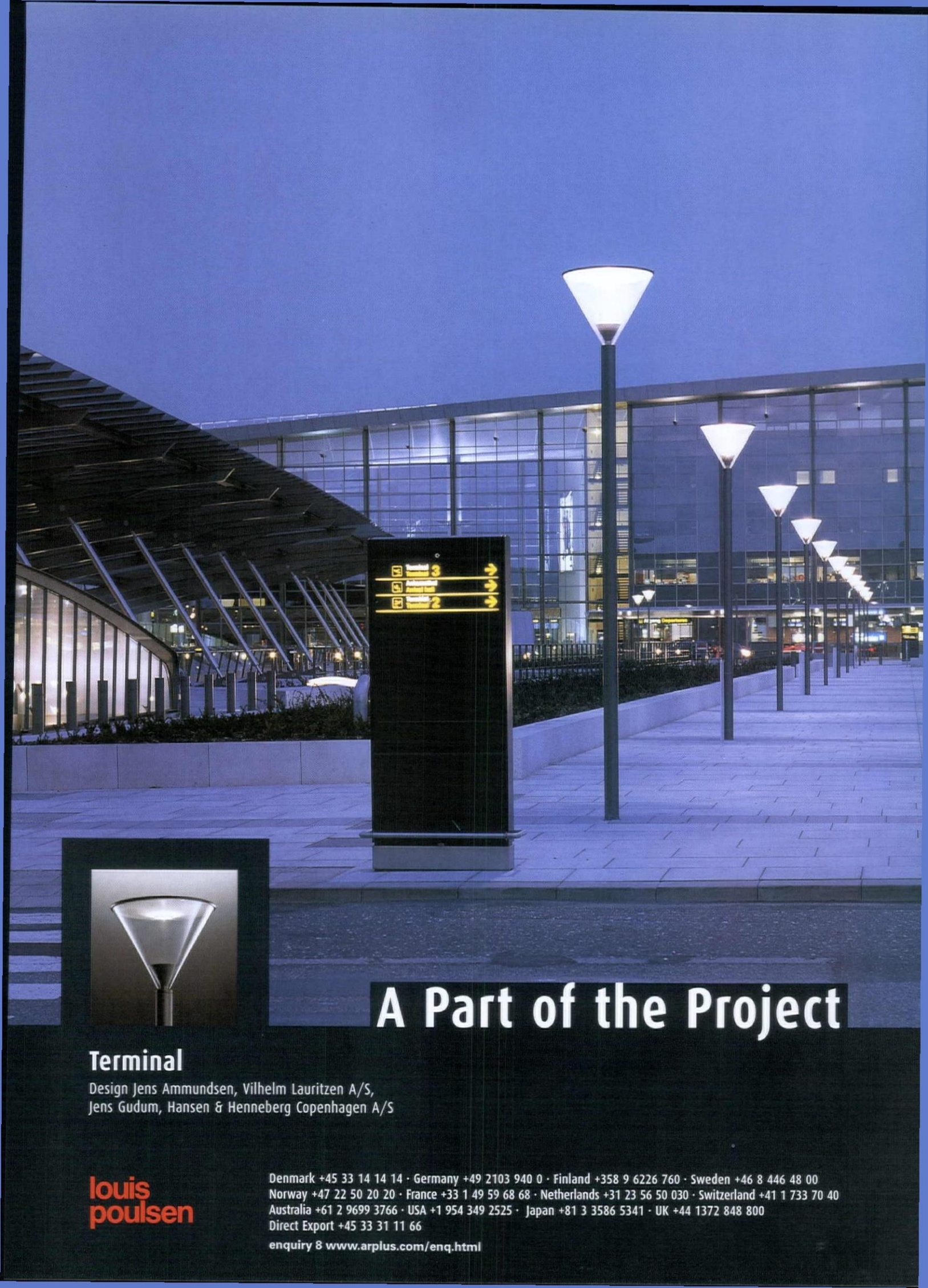
The three basic principles contained in Philip II's ordinance for the creation of new settlements – the criteria for the selection of the sites, the use of the basic grid, and the quadripartite segmentation of the resulting blocks thereafter allocated to the Church, the State, the *conquistadores* and main public servants – testify, in the case of Lima, to the appropriateness and long lasting efficiency of that urban formula. In fact, until the middle of the twentieth century, its urban foundation was still operational, not only because its pattern of uses and public significance were still in full bloom, but also because throughout the four centuries it had proved capable of being adaptive to substantial changes in its infrastructure. Thus, since its foundation, it had to confront what was for the Spaniards a totally unknown telluric phenomenon: the possibility of earthquakes, an unfamiliar threat for Europeans and thus devastating



Lima's main square. The Cathedral was founded in the sixteenth century, then much adapted.



Street corner. Typical colonial construction with ground floor and wattle and daub upper levels.



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Jens Gudum, Hansen & Henneberg Copenhagen A/S

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for buildings – constructed in brick or in stonework without reinforcements – which quickly subsided in the severe tremors that are part and place of the western rim of Latin America. By the seventeenth century – and thanks to the Jesuits – the techniques adapted to these circumstances. *Quincha* (a mesh made of cane woven very lightly, and fixed to a wooden frame, then spattered with mud and finally whitewashed and covered with paint) gradually replaced the brick and stone masonry in every construction above ground, not only in domes or in vaults, but also in walls above the ground floor.

Radical expansion

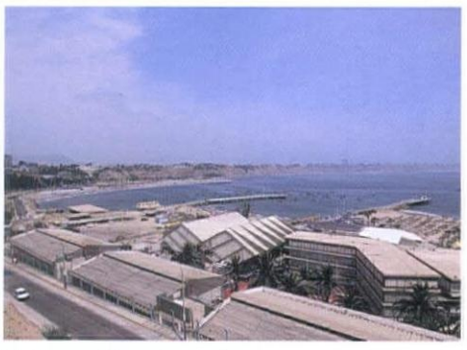
Another development to which the grid easily adapted was the expansion of urban area. Since the sixteenth century, this had gradually occurred mainly in the form of Indian settlements which sprouted up around villages, informally layered as populous neighbourhoods for the merchants, artisans or workers that serviced the city. Then came the exposure of the population to the threat of piracy, a scourge which the Spanish tried to counteract throughout their viceroyalties with fortifications. Defensive structures are still astonishing in many of their cities, and here they adopted the shape of a linear wall that encircled Lima and its Indian neighbourhoods, a kidney-like figure with the ancient grid near its upper haunch, and an open area with orchards and parks sitting in its lap. A century later, industralization and the brave new spirit that came with the Enlightenment encompassed new forms of urban expansion. So came the French boulevard, the railway, the parks, the metallic sheds and Great Exhibitions, with Classical villas and Art Nouveau palaces lining the new parkways and middle-class neighbourhoods.

The startling advantages of the Spanish planning had of course to do with the initial choice of the inland site, a peculiar trait in face of the fact that Lima was founded 10 miles from the sea on an ample valley that fanned out from the course of the narrow waterway of the Rímac river, out into the cliffs that framed a large bay lined with sandy beaches. The decision was an outcome of the ordinance of Philip II, which emphasized that initial settlements were to be established where water and farmland were readily available, and prudently distanced from the ocean, to make them safe from pirates and other maritime threats. Still, the fact that Lima should have undertaken its growth towards the sea in the last two centuries without having turned its surrounding townscape towards the splendid views which the large stretch of high, earthy cliffs offered is very perplexing. Only in the last decades have modern developers suddenly discovered that Lima enjoys this enviable setting, and started to frantically build all sorts of new tenements where its urban areas had approached the cliffs.

But this radical change is threatening the precious survival of the pure relation that had been preserved between open sea, beaches and cliffs and the balanced mixture of scattered constructions and arable land that came to the edge of the fertile valley that dropped towards the ocean. In fact the same viciousness that in fifty years has torn up entirely the gentle relation between town and country that had grown so naturally from Pizarro's grid – that has gluttonously devoured all the arable land that led him to choose the site of his capital – is now on the verge of extending its chaotic mantle of concrete and bustle to the lovely frame of cliffs and beaches.

Deprived of nature?

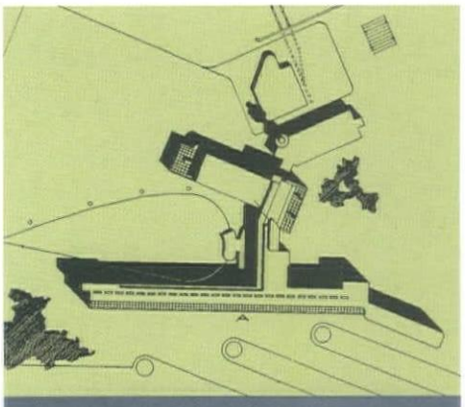
These are the natural beauty which Lima enjoys, and which unless pressure is heavily mounted on local authorities, the forces will finally transform Lima into a metropolis whose citizens are deprived completely of nature's endowments. It's all a long way from Pizarro's wit, the grid with its churches and secular monuments, our delightful *quincha* and the splendid walls framing lovely orchards, and even the ordinariness of our modest boulevards and candid suburbia. Too bad we discovered that we had the sea. FREDERICK COOPER-LLOSA



Modern buildings chaotically smear themselves on the coast road ...



... while Indian street vendors crowd among precarious shacks strung out along the highway.



March

Hospitals and other health institutions are the building types of the Modern Movement: rational and clean, controlled yet open to the latest advances in technology, the canonical hospitals of the mid-twentieth century were some of the most important expressions of the great wave of pride in public provision and egalitarian care that overwhelmed the developed world after the Second World War. They are the places where most people are born, and many die, so as well as being expressions of technological mastery over the material and organic world they are temples for rites of passage. They are usually large institutions, to achieve economies of scale and technology, yet they have to cater for people in fear and pain – individuals who must be tenderly cared for and given direction and hope, not just in getting round the huge buildings, but in navigating their lives.

How do modern hospitals and health care buildings cope with their complicated roles? How are they being built after the collapse of the high Modern Movement? The next AR focuses on hospitals, particularly on a striking new crop from Styria in Austria. The architects who created an amazing explosion of organic housing and public buildings in and around Graz a decade ago, have by a quirk of politics, been forced to re-direct their talents to health buildings, and the results have all the humanity, individuality and sensitivity of the earlier work. We shall also look at buildings for health and welfare in countries as far apart as Germany and the US.

We shall of course have our regular features too; Delight, Interior and Product Design, View and Books. Have this and 11 other issues delivered to your door at a discount by completing the subscription form. Or tap into our secure website:

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1
Stiffness is partly imparted by plan shape.
2
Main beams bear on columns cut from steel plate in silhouette of outstretched hand.

3,4
Half-way along bridge, there is a small gazebo for resting and conversation.

Sinuous link

A new pedestrian bridge elegantly and economically links two halves of a school across a busy road.

The 67m long footbridge, by Birds Portchmouth Russum Architects, at Plashet School, Newham, London, spans a busy road and links the original school and a 1960s building to the north. Using pioneering technology, the architects have created an extraordinary structure which glows at night like ghostly vertebra and which, while protecting staff and pupils from the weather, transforms the experience of crossing the road. For the children, it is a potent and immediate introduction to modern architecture and engineering; and for the school, the bridge is an emblem, drawing attention to its presence. As a result of the bridge, traffic congestion around the school, and particularly around the pedestrian crossing over the road, has been eliminated.

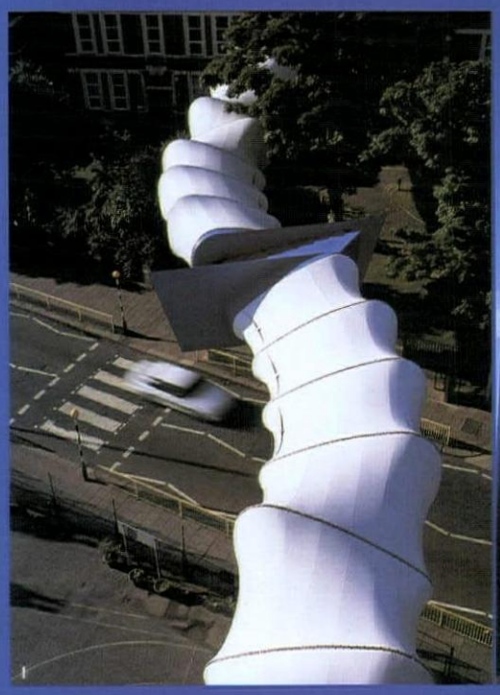
Constructed of steel and translucent Teflon, the fluid form of the bridge curves around, without disturbing, a mature tree in the school grounds. At its mid-point, elevated above the road, there is a resting point for the children, with views to the outside world.

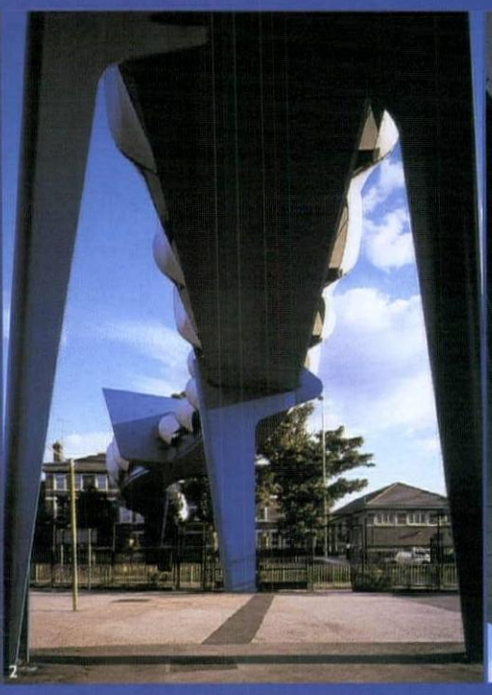
The structure consists of a steel beam, supported on steel columns, a welded steel deck, and the lightweight fabric covering stretched over a series of galvanized steel hoops. Asymmetric hoops alternate along the length of the bridge to give the fabric rigidity and animate the canopy's form. Being sparely designed, the steel skeleton was economic to make, and the skin is cheap, durable and easy to maintain. Its translucency reduced the need for artificial lighting. Detailing expresses construction and functions. Newham's shipbuilding history is echoed in the steel plate welding. Columns are of steel plate cut to a silhouette of outstretched palms; each end of the footbridge is supported on pairs of smaller silhouetted columns which splay out to frame the north school entrance.

The bridge is clamped to the two central columns by wedges driven through large hollow pins. In contrast, the lightweight galvanized steel elements – the hoops, drainage hoppers and gargoyles – are bolted to the carriage. Water collection provides interest on rainy days. Collected by fabric gutters, is rainwater is discharged through galvanised steel hoppers into tubular steel handrails. These descend to gargoyles which drain onto chains down the column face to gullies at the bottom. Internal illumination is provided by lights mounted in round openings at the apex of the steel hoops.

The bridge was constructed with minimum disruption to school proceedings. The main beam, fabricated in three sections in a welding yard in Doncaster, was transported to site during the summer holidays; steel hoops were laser cut directly from CAD drawings and then bolted to the three bridge sections on site. These were craned into place and spliced together over a weekend.

Architect
Birds Portchmouth Russum Architects, London
Project team
Andrew Bird, Richard Portchmouth, Mike Russum, Paul Crawley, Don Schillenburg, Robert Barker
Photographs
Nicholas Kane

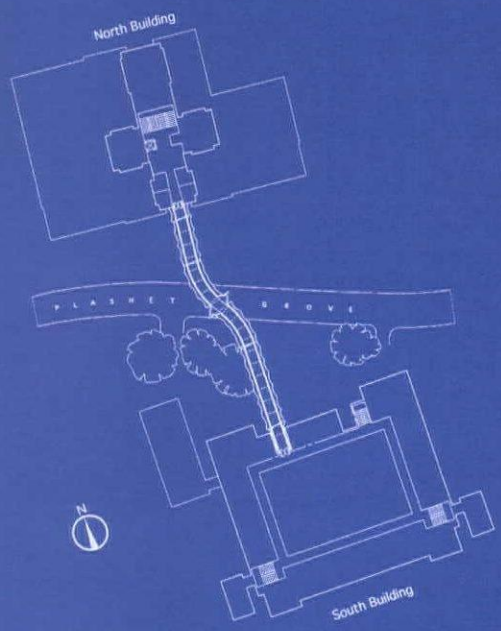

1


2

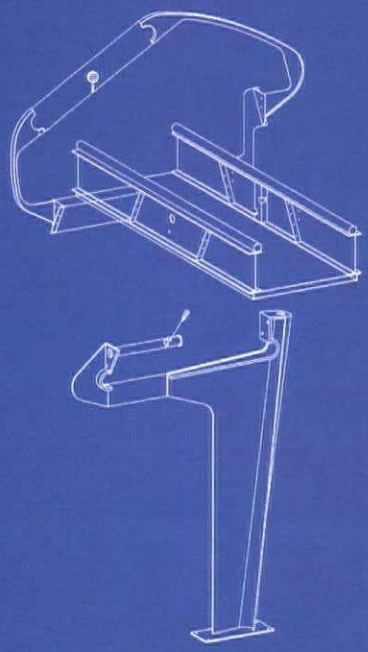

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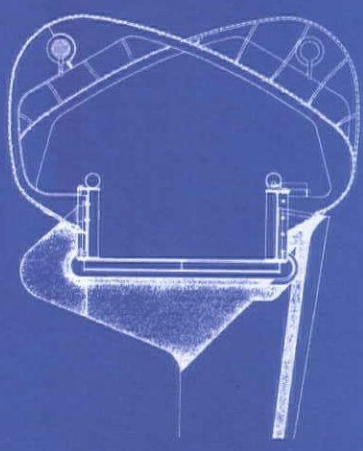
FOOTBRIDGE, LONDON
ARCHITECT
BIRDS PORTCHMOUTH
RUSSUM ARCHITECTS



layout (scale approx 1:1100)



construction



section showing alternation of hoops

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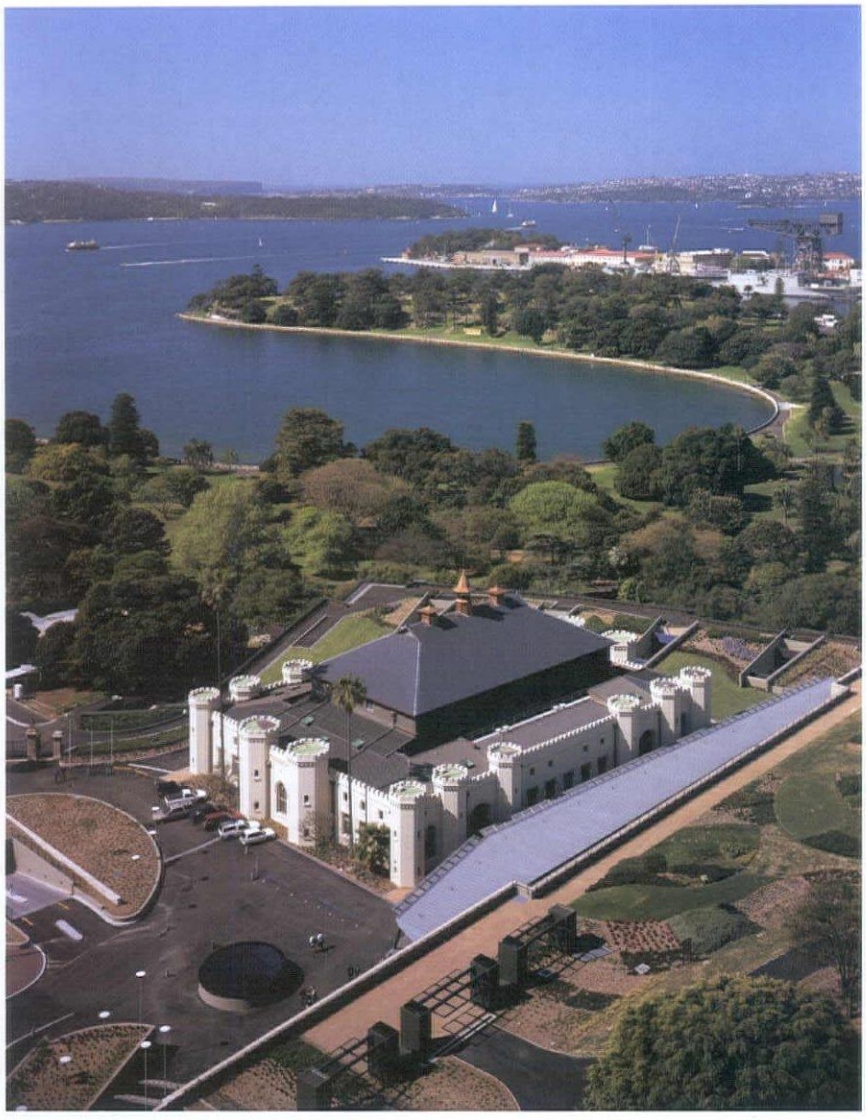
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1

I never tire of saying that Sydney is one of the most magnificent cities in the world. It's not that many of its buildings are particularly outstanding, but the whole composition of the centre is magnificent, with the skyscrapers of the CBD jostling each other on the tight Georgian grid that runs up the hillside from Circular Quay, the place from which all the ferries take you up and down the harbour. The dense picturesque composition is offset by the splendid parks that flow down to the sea and the white sails of the Utzon Opera House.

One of these parks is the Botanical Gardens, some of the very best in the world. In them was set the Govenor's stables, built in 1816 by Francis Greenway, a pupil of Nash transported to New South Wales for forgery. He quickly became NSW Government Architect, and his several styles echoed the work of the master. The stable block resembles Nash's Gothick work, and is basically a rectangular Classical building, with economical brick battlements on top. By 1913, it had become redundant, and Seymour Wells, the Government Architect, converted it to the Conservatorium of Music (the Con), his main move being to roof over the inner court and create a concert hall in it, named after Henri Verbrugghen, the first director.

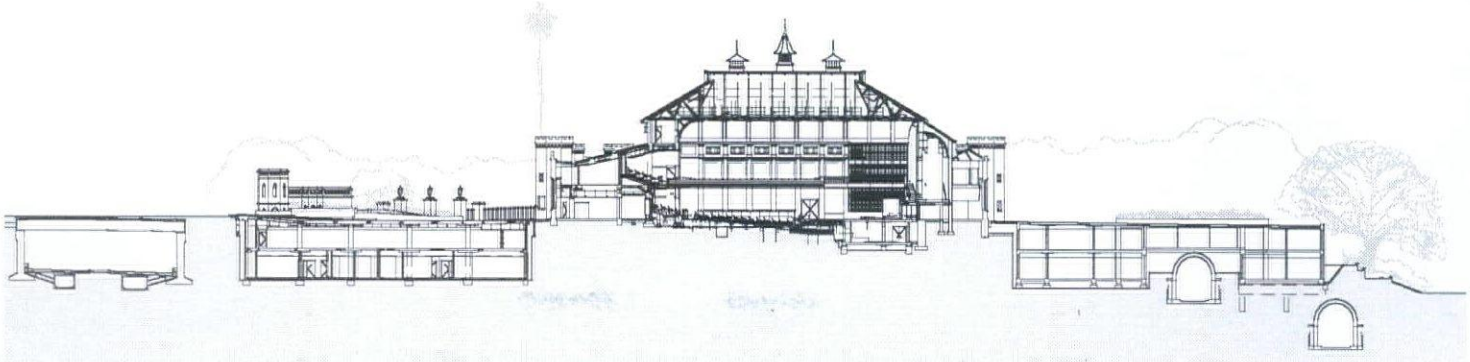
By the '90s, the Con was clearly inadequate in almost every way: far too small, decrepit and with many acoustic problems. Several places were examined for relocation. In the end, it was decided to let it stay on its original

MUSIC CONSERVATORY, SYDNEY, AUSTRALIA
JOINT PROJECT ARCHITECTS
NSW GOVERNMENT ARCHITECT
DARYL JACKSON, ROBIN DYKE

MUSICAL VARIATIONS

This music school opens an issue on leisure because it is not a teaching machine but an institution which promises to enrich the life of the city and all its citizens.

1
Looking east across Macquarie Street. Greenway dominates composition. Botanical gardens beyond.
2
Main entrance to whole complex for public and students.



west-east section, with Cahill expressway tunnel, entrance, Verbrugghen Hall, new terrace of offices and studios – and train tunnels



Buildings for leisure. Below, Frank Gehry's sketch for the Experience Music Project, Seattle; right, National Museum of Australia, Canberra by Ashton Raggatt McDougall.

to find themselves in the army at some time or another) how to be brave in the face of adversity and horrendous wounds.[1]

But the Romans at least knew how to integrate their leisure buildings into the fabric of their cities.[2] The Colosseum and the Circus for instance, though powerful monuments, were intimately embedded in the rest of urban life. The medieval successors who built the churches and cathedrals (in which most public amusement then took place) managed to relate their buildings to their towns – a parvis or close in front perhaps, but as often as not deeply integrated into vernacular texture at the back.

Cultural conversation

Why can't we relate the leisure buildings of our time to the structure of ordinary life? Architects are unable to do much to ameliorate the corrosive effects of leisure on our culture. But they can at least try to make its built expression part of a general cultural conversation. Thirty years ago, Robert Venturi looked at Las Vegas and decided that its junky buildings, devoted almost entirely to the pursuit of commercially organized leisure, could show ways of reinvesting the public realm (then much reduced by the ravages of tired late functionalism) with senses of occasion, arrival and departure, presence and welcome. *Learning from Las Vegas* was one of the reasons why the industrialized world was almost overwhelmed with a tidal wave of tatty PoMo. But perhaps it should be reconsidered now. It did at least suggest how buildings and structures serving leisure could become part of a civilized urban conversation.

Against the ravages of the leisure industries, we need every ally we can find. Much further thought and imagination is needed both organizationally and three dimensionally. Even in a recession, perhaps particularly in a recession which gives us time to breathe and think, we must start to invent ways of trying to tame the terribly corrosive effects of commercial leisure. P.D.

1 Nowadays, the violence is electronic make-believe, though it nonetheless pervades society. Yet we cannot use the Roman excuse: few people are likely to be called up for military service, and when even one of them is killed there is a national calamity (as opposed to hundreds of innocent foreigners who may die by misdirected high-tech weaponry).

2 They did not of course have the problems of car parking.



3

MUSIC CONSERVATORY, SYDNEY, AUSTRALIA

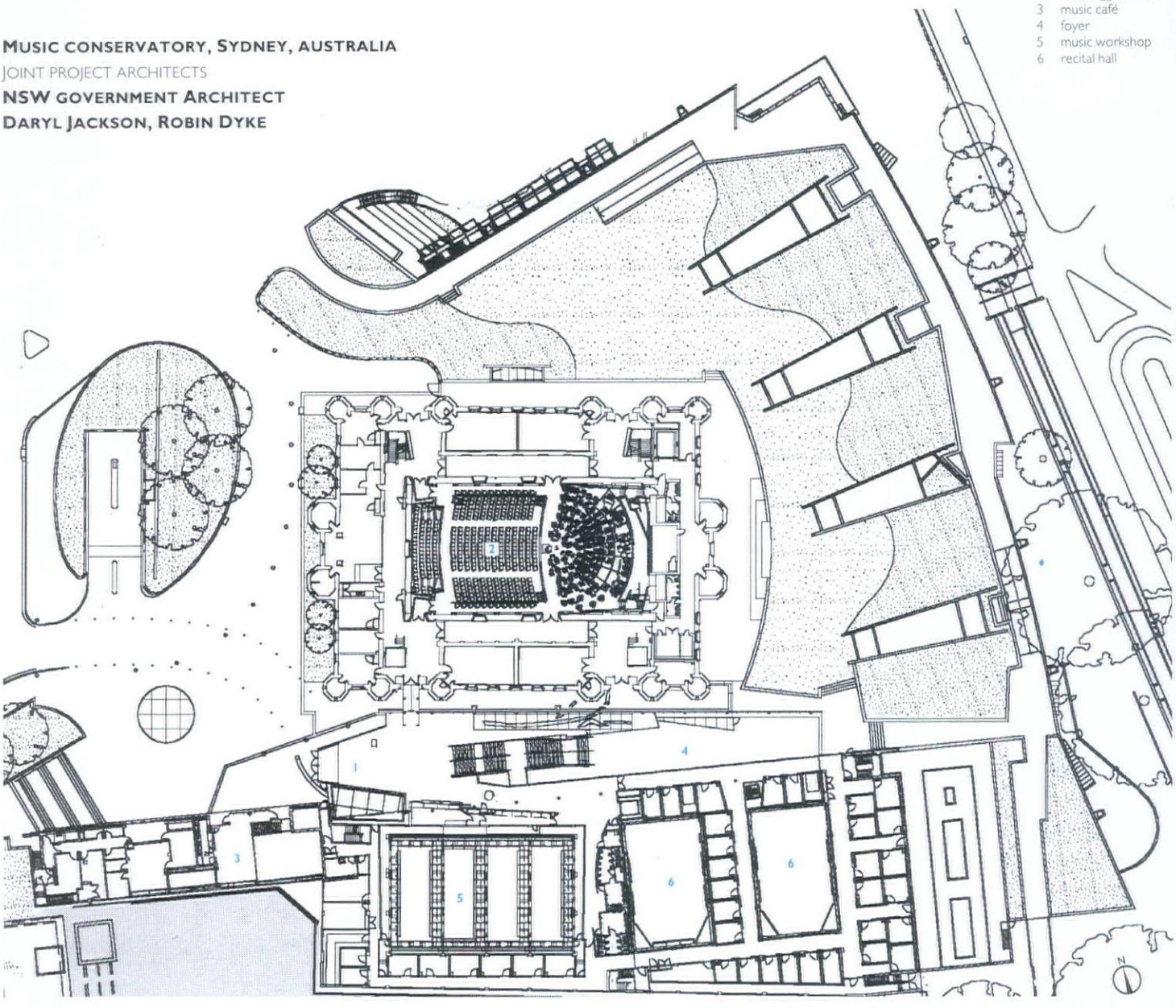
JOINT PROJECT ARCHITECTS

NSW GOVERNMENT ARCHITECT

DARYL JACKSON, ROBIN DYKE

LEVEL 3

1 entrance
2 Verbrugghen Hall
3 music café
4 foyer
5 music workshop
6 recital hall



level 3 (ground). Scale approx 1:830. All plans are to small scale





4

site. But there were many problems: masses of new accommodation had to be added, conservationists were determined to preserve the gardens and the old building, from which blurring '60s additions had to be pulled off. Chris Johnson, the New South Wales Government Architect, produced a basic parti, in which Greenway's building would be cleaned up, and the new 30 000 square metres of space were to be placed underground. So, on top, a landscaped terrace overlooks the gardens and is part of them. Underneath this grassy plateau is an extraordinarily complex maze, toplit as far as possible, with numerous small studios and practice rooms.

Daryl Jackson Robin Dyke Pty, became the project architects, working with acoustic consultants Kirkegaard & Associates of Chicago. The main obvious new move is the long foyer that runs out from Greenway's building towards Macquarie Street (the city's equivalent of Park Lane or Fifth Avenue). What you see from outside is mainly a lightweight metal and glass pavilion and of course, the Greenway building, now rendered white. But the pavilion is the entrance space for the whole organization and it leads down to the underground levels as well as giving access to the old building. Its long volume is full of light from clerestoreys and rooflights. Cut down into the soft rock of the ridge, the space is dramatic, with the buttery sandstone strata exposed under the old building. Remains of a lost convict-built road are exposed, as are many other relics of the past, displayed in museum-like cases. The whole place is full of students and visitors,

3
East front looking over new terrace towards peaks of Opera House.
4
Generous canopy welcomes all visitors.



5

MUSIC CONSERVATORY, SYDNEY, AUSTRALIA

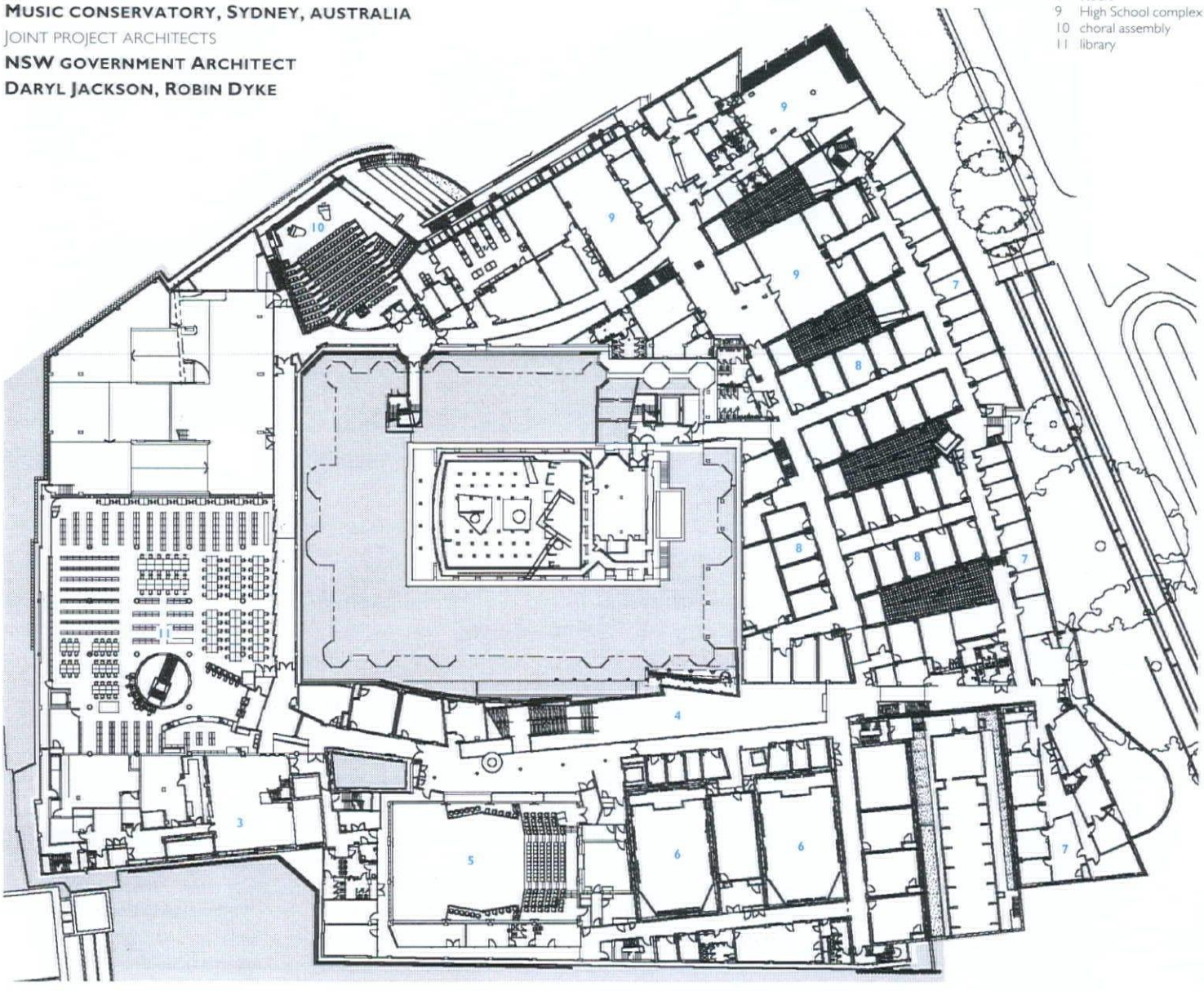
JOINT PROJECT ARCHITECTS

NSW GOVERNMENT ARCHITECT

DARYL JACKSON, ROBIN DYKE

LEVEL 2

3 music café
4 foyer
5 music workshop
6 recital hall
7 offices
8 studio
9 High School complex
10 choral assembly
11 library





6

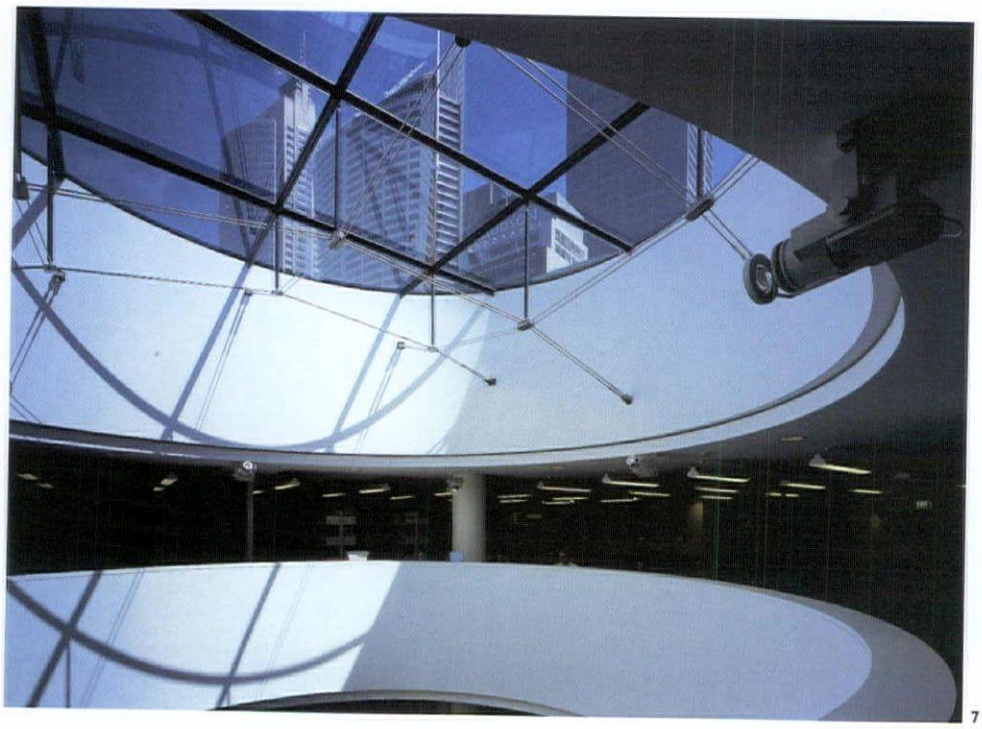
happy and chattering against a muted background of music from the practice and recital rooms.

One of the major problems of a music school is of course noise, both from outside and in. The site is nothing if not noisy: Macquarie Street is busy with traffic, and the roaring Cahilll expressway emerges from its under-park route almost opposite Greenway's west front. Underneath the new terrace are two busy railway tunnels, one of which actually goes through the building. To counteract all this vibration, the main performance spaces are supported on movement-reducing bearings – steel springs and rubber pads, so that the main performance volumes are separated from the structure in general, and from the surrounding ground.

Walls between practice rooms and studios are made of heavy concrete blocks with independent plasterboard inner skins to prevent lateral sound transmission. Their stiff floors, made of composite layers of plywood and particle board are supported independent of the heavy walls by resilient pads, so the inner shells are virtually independent rooms, carefully sealed, and with two layers of laminated glass where they have windows.

The Verbrugghen Hall has been restored as a vibration isolated structure. Its 1960s proscenium was removed and its original gallery has been demolished because it caused sound shading below it. Its roof is a new precast concrete shell, giving mass to counteract airborne road noise. The heavy terrace with its layer of soil, between 600 and

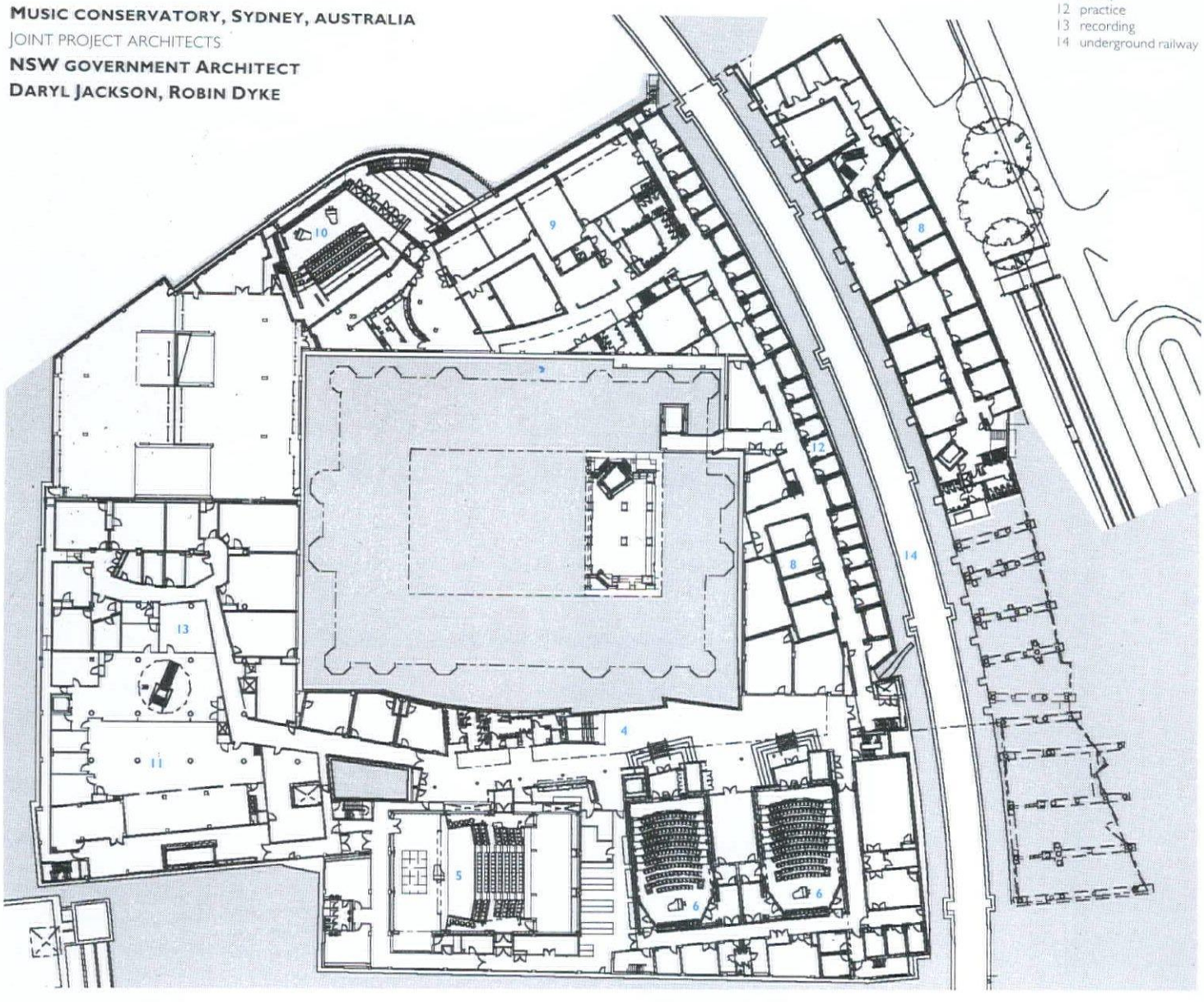
5
Looking down from entrance into foyer ...
6
... where buttery sandstone is exposed.



7

MUSIC CONSERVATORY, SYDNEY, AUSTRALIA
JOINT PROJECT ARCHITECTS
NSW GOVERNMENT ARCHITECT
DARYL JACKSON, ROBIN DYKE

LEVEL 1
4 foyer
5 music workshop
6 recital hall
7 offices
8 studio
9 High School complex
10 choral assembly
11 library
12 practice
13 recording
14 underground railway





8



9



10



11

750mm deep, clearly helps to exclude external noise from the studios and offices below. Light courts and skylights provide luminance from the sky. In its north-eastern corner, where the Conservatorium's High School is housed, the terrace plan has been eroded to conserve important trees in the Botanic Gardens, some of which are over 150 years old.

To me, the only place which does not work properly is the forecourt. Almost opposite Renzo Piano's spectacular tower is a sea of asphalt leaking out northwards to Government House Drive. But once you are past the car stuff, the Con offers generous welcome and clearly makes an important contribution to civic life. As Elizabeth Farrelly said in the *Sydney Morning Herald*, 'Whether it was right to keep the Con downtown depends on your opinion of cities, music, gardens, archaeology and heritage ... [The] way it puts students in the streets, music in the air, light in the earth, energy in the Greenway and archaeology in that enchanted public space is worth every penny. It could so easily have been just another Sydney con game'. JOHN GRAVES

Joint project architects
NSW Government Architect, Sydney
Daryl Jackson, Robin Dyke, Sydney
Project team
Alastair Swayn, Peter Quigley, Daryl Jackson, Robin Dyke, Barry McGregor, Alex Kibble, Simon Anderson, Daniel Beekwilder, Tom Bomford, Patricia Gosling, Stephen Jones, Mirjana Males, Tracy O'Connor, Roger Rajaratnam, David Somerville, Ian Smith, Mike Smith, Kaz Zielinski
Acoustic consultant
Kirkegaard & Associates
Structural, mechanical, hydraulic, fire, lift, traffic and civil engineer
Ove Arup and Partners
Photographs
Eric Sierins (Max Dupain & Associates)

7
Library skylight framing Piano's Aurora Place (AR February 2001).
8
Renovated Verbrugghen Hall.
9
Music café.
10
Music workshop.
11
East recital hall.



1

CHASTITY IN VADUZ

A reserved and very well controlled gallery makes a welcome contrast to the kitschy muddle of the rest of Vaduz, and offers calm spaces for contemplation.

Liechtenstein is a peculiar place. Sandwiched between Austria and Switzerland, the tiny state has had independence since the fourteenth century. Due to the benign government of the princes, who live in the Schloss that hovers over the capital Vaduz, its 30 000 inhabitants pay few taxes, and enjoy an income higher than almost any other people in Europe – they approach the Swiss in affluence.

Few visitors would understand this from a casual visit to Vaduz, which seems at first like a dull Germanic provincial city. But suburban-looking houses often have a cow or goat in the back garden. As a town, Vaduz offers a concatenation of kitsch detailing scarcely emulated this side of Las Vegas (though wild ostentation is kept in check by bürgerlich primness). But on each side of a vulgar villa are probably small but successful branches of a couple of international banks – in fact, the villa may be one itself. With its liberal and secretive financial laws Liechtenstein is one of the world's great centres of shuffly money, and indeed, the monstrous former proprietor of this magazine, the vile swindler Robert Maxwell, had one of his last financial redoubts there.

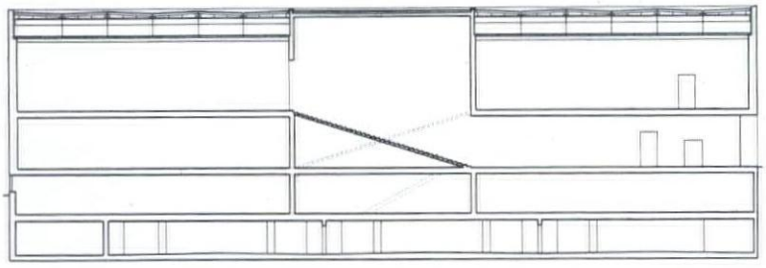
In complete contrast to the kitschy muddle of the rest of Vaduz, the new national art gallery is calm, clear and precise. A carefully honed black rectangle huddles with the few obvious commercial buildings under the wooded slopes of the castle hill. Unlike its neighbours, it is not obviously welcoming. Its blank face, almost threatening, is adorned only with the chaste words 'KUNSTMUSEUM LIECHTENSTEIN'. But looking at it slightly from the side, the grimness becomes altered. Here is architecture, rather than sloppy sentimentality or crass commercialism.

The 400mm thick wall, cast in situ, seems almost geological; the day-work levels of its creation can be clearly seen like strata. There are no movement joints because the whole structure is prestressed. And the black



2

1
Almost blank west (service) front with Schloss behind.
2
Chaste east front, with entrance and café.
3
Café faces south, and expands on sunny days ...

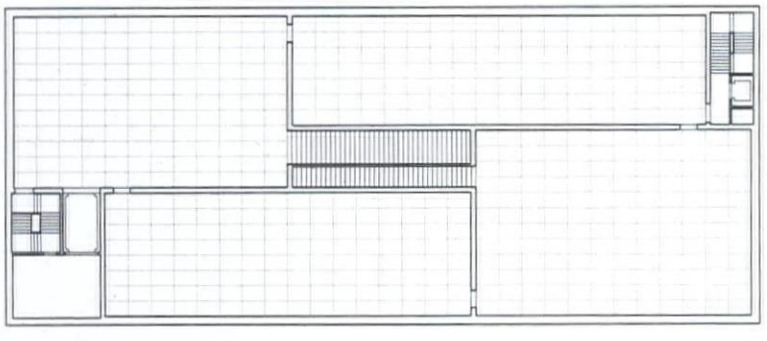


long section

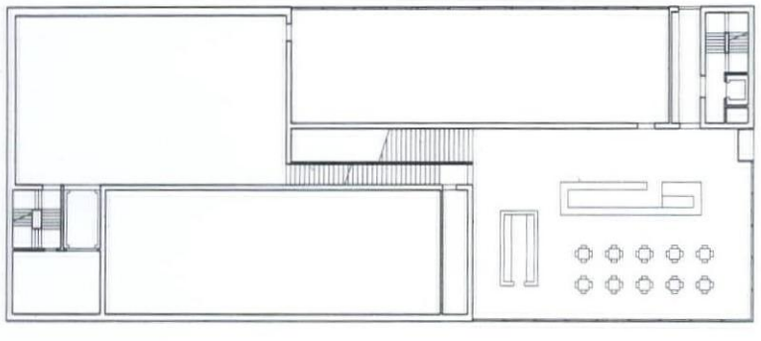
ART MUSEUM, VADUZ, LIECHTENSTEIN

ARCHITECT

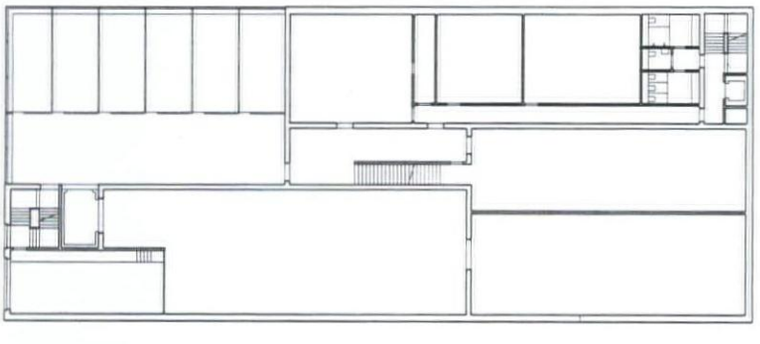
MORGER, DEGELO AND KEREZ



first floor



ground floor



first basement (scale approx 1:480)

cement and the carefully graded black basalt course aggregate are enlivened by green, red and white Rhine gravel, which makes the whole surface glitter and glint, changing as you walk round it. Carefully chosen, the basalt is smashed and sharp-edged, adding to the sparkle of the box. The whole exterior has been polished smooth to make the block more crystalline.

Inside, everything is equally apparently simple, but actually very carefully and sensitively thought about. The plan is almost diagrammatic. A welcoming café greets visitors, and a generous oak stair leads to the galleries above. Everything is calm, precise and minimal. Luminous ceilings are lit from the sky (on the top first floor) and balanced by artificial lighting; floors are oiled oak like the stairs, walls are of simple plaster painted white.

The architects clearly share preoccupations with their neighbour Peter Zumthor (over the border in Switzerland's Graubünden): light; materiality of construction, essence. And they are concerned with our response to the awesome business of making shelter, and inviting nature, which we reject by the very act of building, to influence our lives in the enclosures we make.

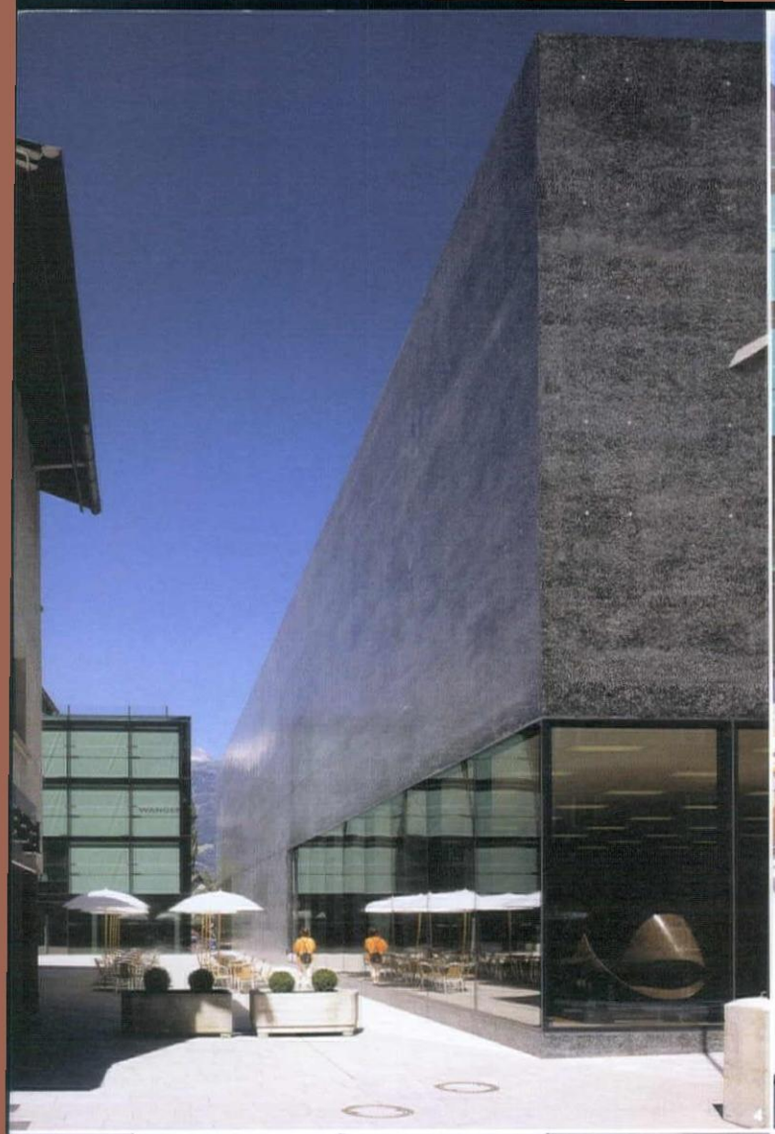
The building is the more remarkable because it has been made under a contract in which the builder had a great deal of say and the Swiss architects were distanced from its construction. Its design shows some of the virtues of Minimalism: you can keep the builder in order if you make the design simple and clear enough. JUNO PECKENHAM

Architect
Morger, Degelo/Basel and Kerez/Zurich
Project team
Meinrad Morger, Heiri Degelo, Christian Kerez, Nicole Woog, Benjamin Theiler, Heike Buchmann, Dagmar Strasse, Raeto Studer
Lighting
Ove Arup & Partners, London
Photographs
Paul Raftery

4
... to give life to its little square.
5
Café interior – almost utilitarian in its simplicity.
6,7
Toplit galleries on first floor.

Art museum, Vaduz, Liechtenstein
Architect
Morger, Degelo and Kerez

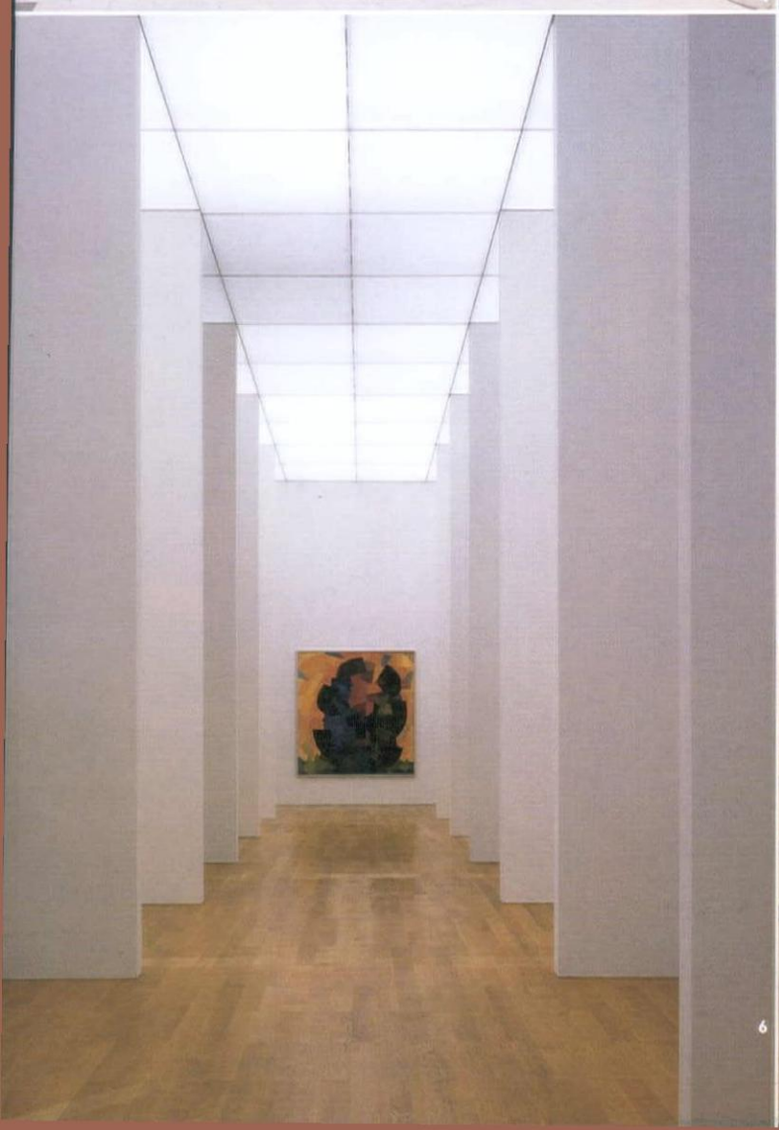




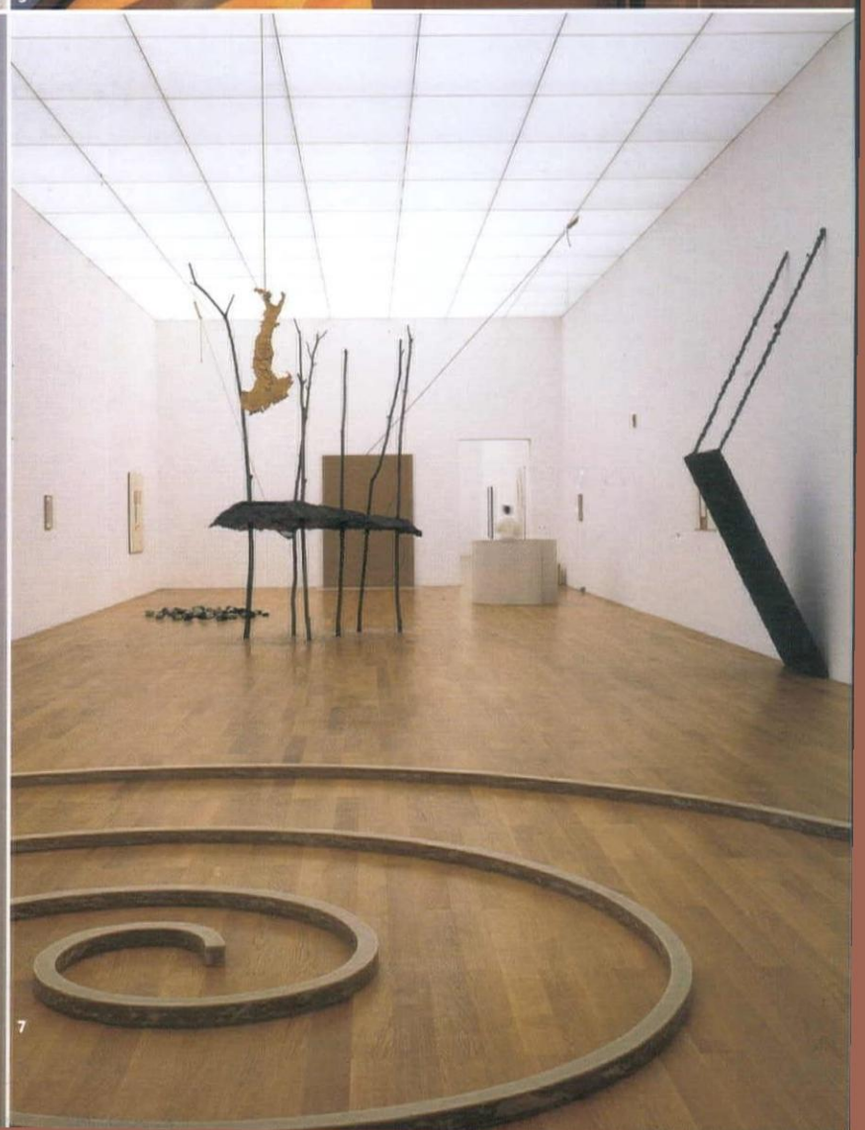
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5



6



7

ICE RINK, GRENOBLE, FRANCE
ARCHITECT
HÉRAULT ARNOD ARCHITECTS

ICE WORK

Grenoble's ambitious new ice rink transfigures everyday materials into a dazzling synthesis of light and colour.

The Winter Olympics of 1968 was a watershed in the evolution of Grenoble, strongly influencing subsequent patterns of urban growth. The town's new ice rink replaces the building originally designed for the games, the demise of which was hastened by evidence of potentially dangerous chlorine leakage.

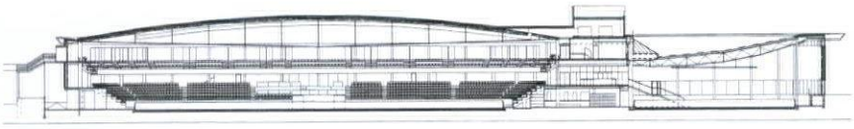
For Isabel Hérault and Yves Arnod, the project was never simply one of constructing a specialized sports building, but was also about the production of an architectural object and system which would lend spatial and visual cohesion to new town Grenoble. This is a case where commissioning architects with close, local associations led, not as it often does, to blandness and conformity, but to a completely atypical solution, informed by the subtleties of local knowledge. The new building is bigger than the late '60s original, providing two rinks to accommodate simultaneous demand for facilities by professionals and general public alike. There is little difference in the sizes of the principal and secondary rinks (60 x 30m and 56 x 26m respectively), but only the main one has full stadium facilities. It has 3500 seats and is geared for the various ritual practices of ice-skating competitions and top level professional ice hockey, with extensive press boxes and entertainment lounges.

The facade is a continuous curving and undulating band wrapped around the two major interior volumes. Transmission of interior form to the exterior is one of many expressive manoeuvres achieved by the building's skin. In contrast to the expected characteristics of a flagship of civic identity, the architects have rejected all references to local materials, and have opted for the cheapest mass-produced cladding. In fact,

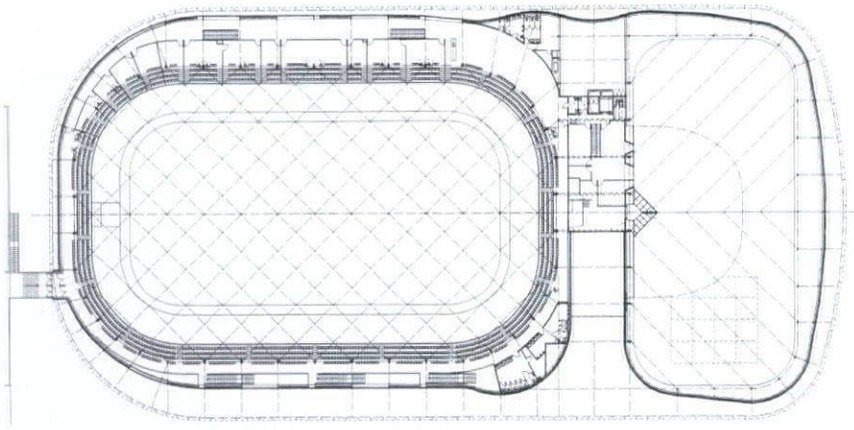


1
The undulating steel band of the facade softens the building's mass.
2
Bold fibre-optic graphics enliven the surface and strips of glazing reveal the building's inner life.

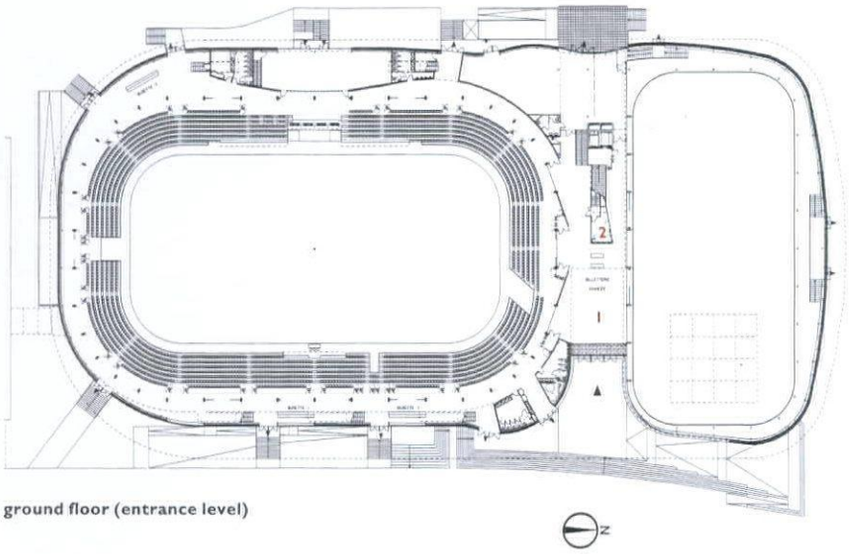




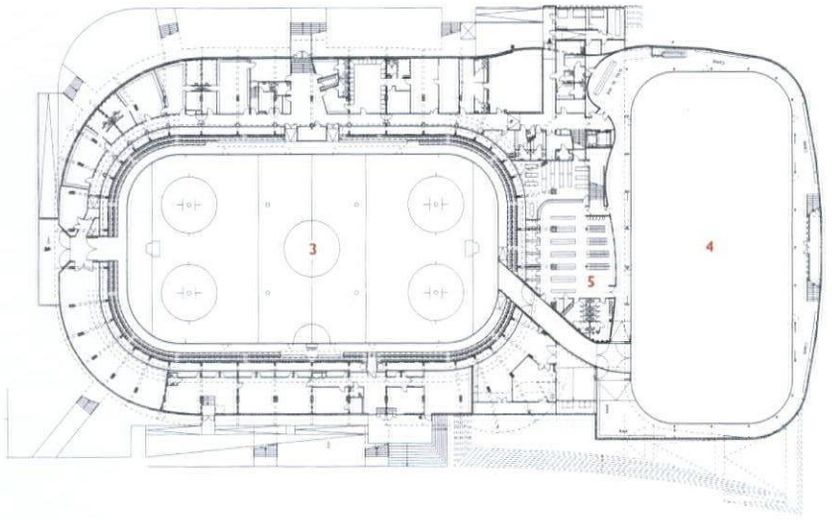
long section



first floor



ground floor (entrance level)



lower ground floor (scale approx 1:1250)

1 entrance
2 tickets
3 main rink
4 practice rink
5 changing rooms

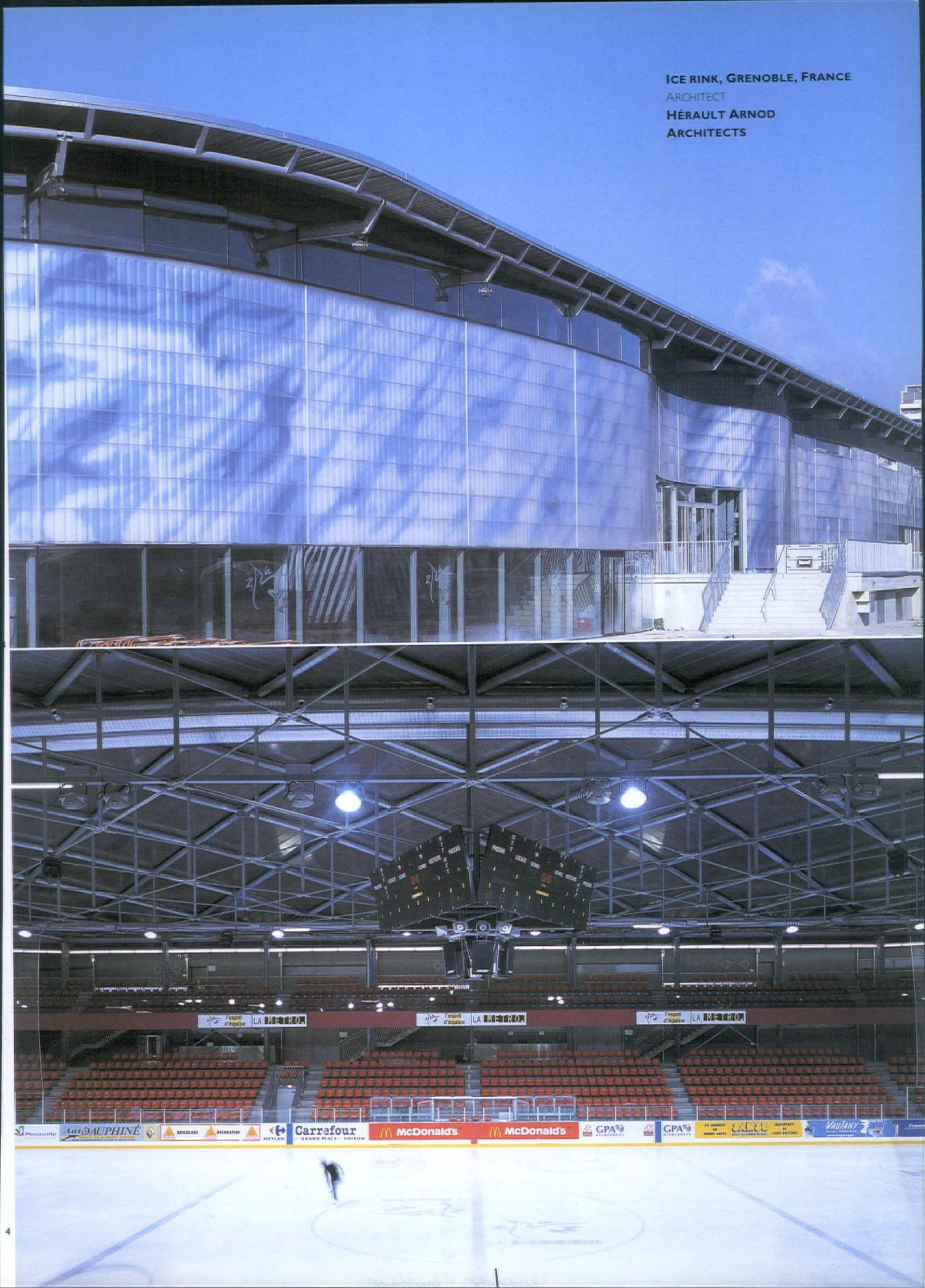
the inner layer is made of that most common-place of materials: heavy duty corrugated metal, used universally for warehouses, cargo containers and building-site cabins. The outer layer is no less rudimentary: semi-translucent, polycarbonate sheeting, simply bracketed and screwed onto the metal with a 500mm gap in between.

Between these two ordinary skins lies the means of their transfiguration: graphics and fibre-optics. Nantes-based artist Jackie Dumonteil has designed a blue and white spray-paint maculation of the inner, corrugated surface. It follows a previous collaboration for the garden-facing facade of a university campus building, also in Grenoble. There, the effect was essentially one of painted camouflage. For the ice rink, Dumonteil has taken the notion of an environmentally adapted, graphic intervention a step further, to represent or mimic elements of the building's internal activities and its social context. The markings push more toward abstract than figurative forms, but manage to hold on to various figurative possibilities, staving off a complete collapse into pattern. They evoke movement – of figures gliding across ice, of shadows, of clouds – but also seem to cohere into monumental, spray-can graffiti.

Fibre-optic wires allow the graphics to take on a nocturnal aspect. Their intervention is less subtle, but is distinctive enough to act as a non-linguistic sign for the building and may prove sufficiently seductive to attract permanent colonies of night life to this part of the new town.

The exterior form of the building – which, in its simplest terms, is a rounded rectangle – also makes an explicit gesture of affiliation toward one of the key landmark modern buildings of Grenoble. Across the road to

3
Sensual play of markings on the facade evoke the swirl of clouds, shadows and figures on ice.
4
The main stadium rink crowned by its trapezoidal firmament.



Ice rink, Grenoble, France
Architect
Hérault Arnod Architects



5



6



7

ICE RINK, GRENOBLE, FRANCE

ARCHITECT

HÉRAULT ARNOD ARCHITECTS

5
Main professional rink which can accommodate ice hockey games and ice-skating competitions.
6
Secondary practice rink.
7
Seating and roof structure.

the south of the rink is a 1970s conference and trade fair facility by Jean Prouvé, its corners neatly rounded in a characteristic application of metal panel construction.

The open, tubular steel framework of the roof spreads a firmament of trapezoids across the rinks and could be interpreted as homage to the legacy of Prouvé. The architects liken the total form to a muscle in contraction, bulging over the space of the stadium rink, creating a shallow dome, and turning concave to cross the much shorter expanse of the width of the practice rink. This metal canopy projects well beyond the facade on all sides and its main structural liaison is with a series of reinforced-concrete columns (42 in the stadium rink, 26 in the secondary rink). These are hinged at top and base in anticipation of Alpine seismic activity.

Interiors are the result of an unashamed celebration of an entirely synthetic environment. They are an expressionistic mix of raw materials, typography, colour and artificial lighting, involving often quite bizarre detailing – such as a series of rounded slabs in turquoise rubber for the benches of the public changing rooms, and bright green pegboard for the ceilings of the press boxes.

Hérault Arnod have devised a comprehensive programme and fusion of structural systems, aesthetics and urban stage setting. Given the originality of its styling, the building's sense of vitality should prove durable. But the complex relationships between structure and decoration may mean that the building's success will be heavily reliant on the dedicated application of future maintenance. ROBIN WILSON

Architect
Hérault Arnod Architectes, Grenoble, France
Structural engineer
Alto, Marc Malinowsky
Services engineer
Nicolas
Cost consultant
Michel Forgue
Facade frescoes
Jackie Dumonteil
Photographs
Paul Raftery/VIEW

SKI JUMP, WILLINGEN, GERMANY

ARCHITECT

PAHL + WEBER-PAHL

2
Dynamically sweeping down the curve of the hill, the steel structure has an impressive lightness and delicacy.
3
Glazed eyrie of warm-up room.

Invented and popularized by the Norwegians (particularly the ruling Swedish royal family, whose passion for the sport established its credentials in the late nineteenth century), ski-jumping combines balletic poise and death-defying spectacle. Such lyricism tends to be less evident in actual ski-jump structures, typified by their resemblance to hulking oversized slides. Pahl + Weber-Pahl's new ski jump at Willingen in Germany's mountainous Hochsauerland region is a surprisingly elegant response to an inherently pragmatic programme compounded by a very tight construction schedule.

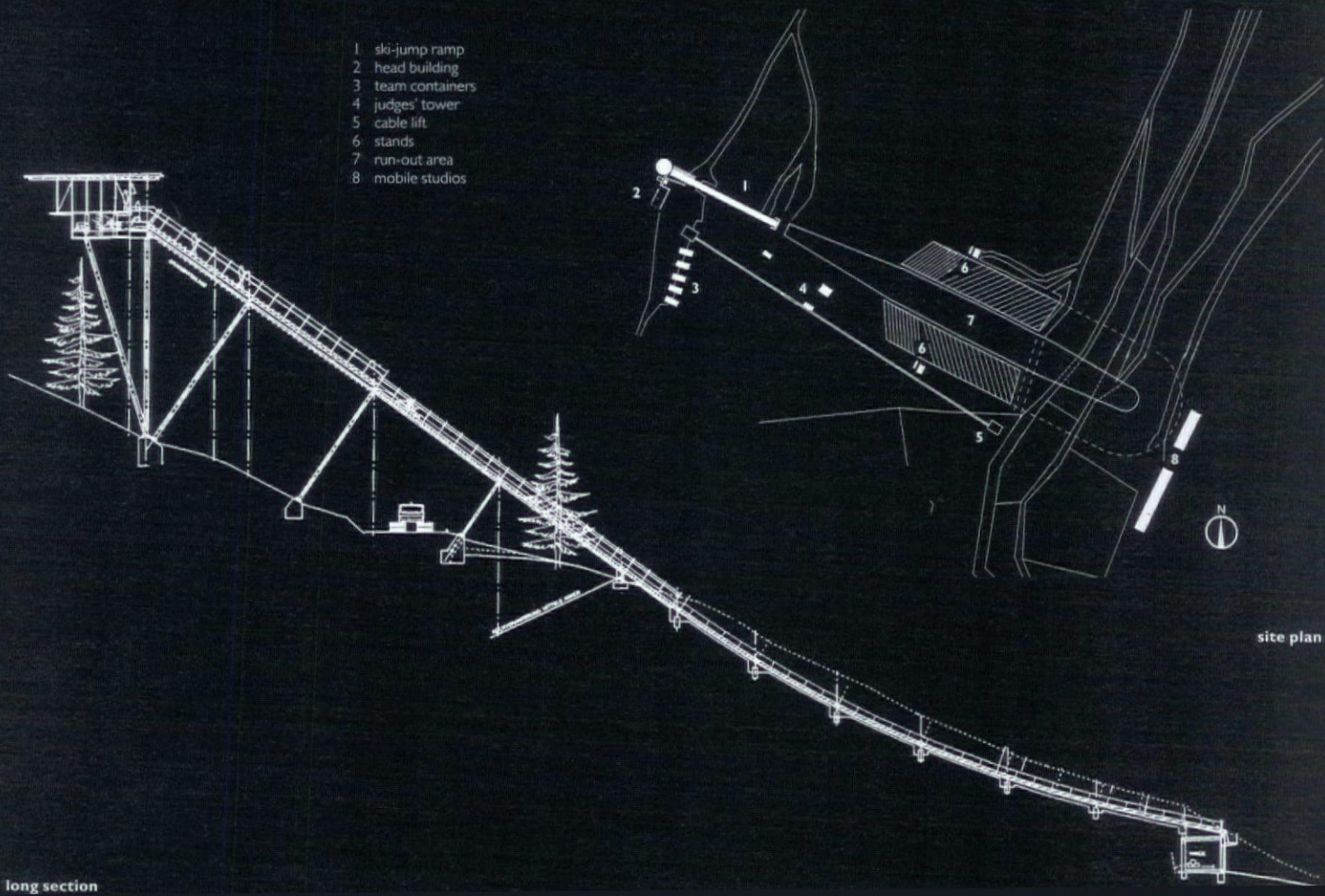
A traditional winter sports resort, Willingen has, over the years, established itself as a venue for World Cup skiing and ski-jumping. Its existing ski jump, however, was unable to cope with increasing technical demands and spectator numbers. It was decided to demolish it and build a new structure all within the space of a year, between annual World Cup competitions. This left a very tight construction period of only four months.

The structure consists of three elements: a slender access tower clad in thin timber slats, a vertiginous glazed warm-up pod, and the ski jump ramp itself, its geometry dictated by the sport's regulations concerning safe jumping trajectories and distances. These were clarified on site with the help of a full-sized model of the actual track along the gradient. All the structural elements, including the balustrades, are placed at right angles to the ramp, achieving formal consistency. The lightness and simplicity of the steel structure emphasizes the sweeping, dynamic curve of the ramp.

The ramp is made up of a U-shaped steel trough 2.7m wide. Across the inside of the trough, stiffener plates are welded to precast concrete inlays with thermal insulation, waterproofing and fixing points for the 300mm thick snow cover. Cantilevered sections attached to the outside of the trough support technical equipment and an acrylic wind diffuser. Steps on both sides of the ramp are bolt-fixed to the trough. The ramp widens at the top to accommodate access areas for jumpers, officials and camera crews.

The ramp is supported by tubular steel masts, ranging in diameter from 190 to 350mm. Their joints rotate along the hill's longitudinal axis, but are very stiff in cross axis to reduce vibration. The ramp was prefabricated in sections, craned onto the columns and then rigidly fixed to the access tower by means of a bridge link which braces and strengthens the structure. The tower is glazed on the side facing the valley, so that spectators can see the skiers ascending to take flight.

Drenched in moody blue light after dark, the two-storey glazed pod at the top of the ramp



site plan

long section



SKI JUMP, WILLINGEN, GERMANY
ARCHITECT
PAHL + WEBER-PAHL

1
Dramatically illuminated, the top of the ski-jump structure appears to hover weightlessly above the hill. Competititors rise up through an access tower to reach a glazed warm-up pod before hurling themselves down the ramp.

TAKING FLIGHT

Drawing on the grace and dynamism of the sport itself, this precisely engineered new ski jump was constructed in a very tight timescale to replace an existing outdated structure.



1

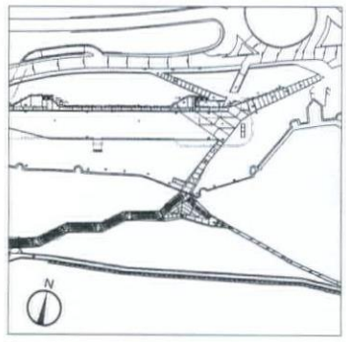
1
At the top, the escalator terminates in a dramatic belvedere.
2
Zigzagging up the side of the hill, the staircase forms a series of taut incisions in the landscape.

SPANISH STEPS

Spectacularly cut into the hillside surrounding Toledo, this external stair elegantly and efficiently transports tourists up to the historic city centre.

Poised precipitously on a hill overlooking a sharp bend in the River Tagus, the city of Toledo has remained miraculously unchanged since the end of the Middle Ages, when it formed the epicentre of Spanish political, cultural and religious life. Confined within its massive city walls is a dense medieval labyrinth of streets, which now heaves with tourists and their cars. At times it is an uneasy coexistence, epitomizing the familiar dilemma faced by historic centres in how best to accommodate the demands of modern visitors.

The city authorities decided to limit non-local traffic by constructing a new garage for 400 cars at the bottom of the hill. But tourists somehow still had to negotiate the steep topography to reach the historic centre over 100ft (36m) above. An external escalator carved into the hillside efficiently resolves the problem of access and provides a wonderful scenic promenade as a foretaste to the delights of the city. The escalator is connected to the car park by a passageway carefully inserted below the foundations of the existing medieval city



site plan



2

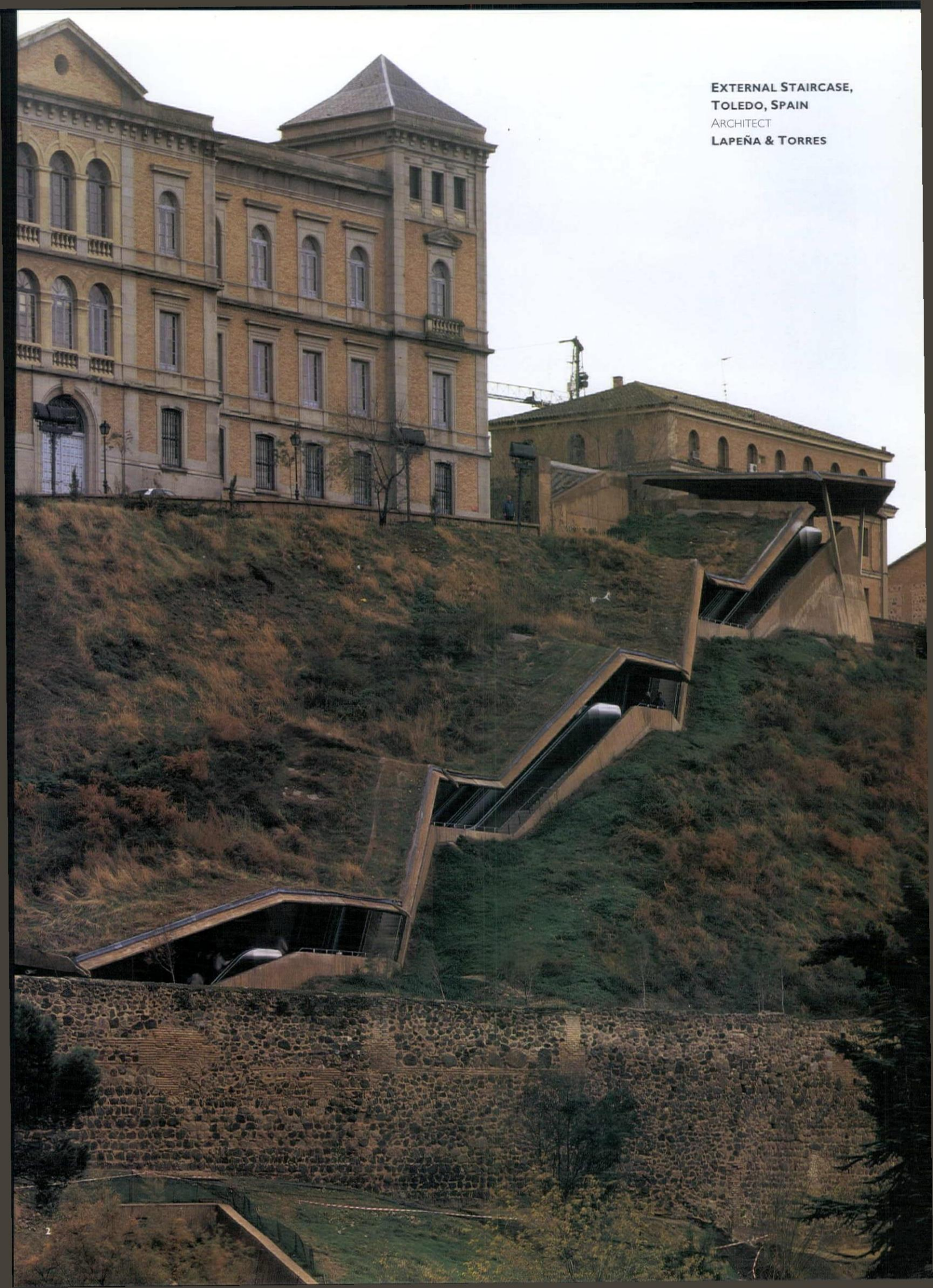
resembles a flying saucer hovering over the hill. The lower storey is constructed like a ship's hull with steel internal ribs. Above, a grid of beams supports the glazed eyrie of the warm-up room. Cladding mullions carry the lightweight broad-brimmed roof. In its graceful form and precisely engineered structure, the ski jump emulates the drama and daring of the sport itself.

CLAUDIA KUGEL

Architect
Pahl + Weber-Pahl, Darmstadt
Project team
Burkhard Pahl, Monika Weber-Pahl, Stefan Hambach, Stephan Neumahr, Thomas Ulrich
Structural engineers
KHP König, Heunisch & Partner
Site modelling
Gröticke & Partner
Photographs
Stefan Schilling



3



External Staircase,
Toledo, Spain
ARCHITECT
Lapeña & Torres



3

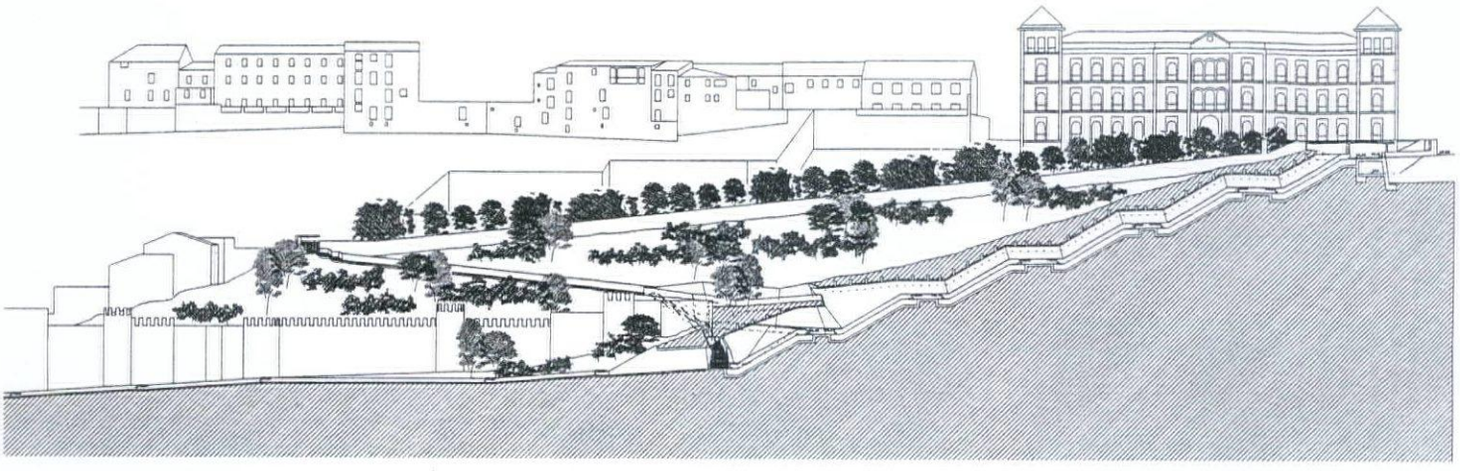
walls. This marks the beginning of the route and forms a new city portal.

Constructed in six sections that zigzag up the cliff face, the escalator is supported by a concrete structure and foundations lying on bedrock some 30m below ground. The concrete is coloured a warm ochre that recalls the traditional earthy hues of Toledo's buildings. The inside of the escalator is flanked by a retaining wall which is cantilevered at the top to shelter users, so that the structure appears half buried in the landscape. The division into sections encourages a leisurely upward progress, animated by changing views of the Tagus plain stretched out below. At the top, a contemporary version of a belvedere frames a final breathtaking vista before visitors immerse themselves in the dense fabric and delights of the historic centre.

Great care has been taken to minimize the visual and ecological impact of such a potentially intrusive new structure. From a distance, the escalator is tantalizingly imperceptible, appearing as a series of taut incisions in the terrain. At Toledo, the weight and presence of history and the demands of modern tourism are, for once, boldly and intelligently reconciled.

CARLA BERTOLUCCI

Architect
Jose Antonio Martínez Lapeña & Elias Torres Tur, Barcelona
Structural engineer
Gerardo Rodríguez
Photographs
Roland Halbe



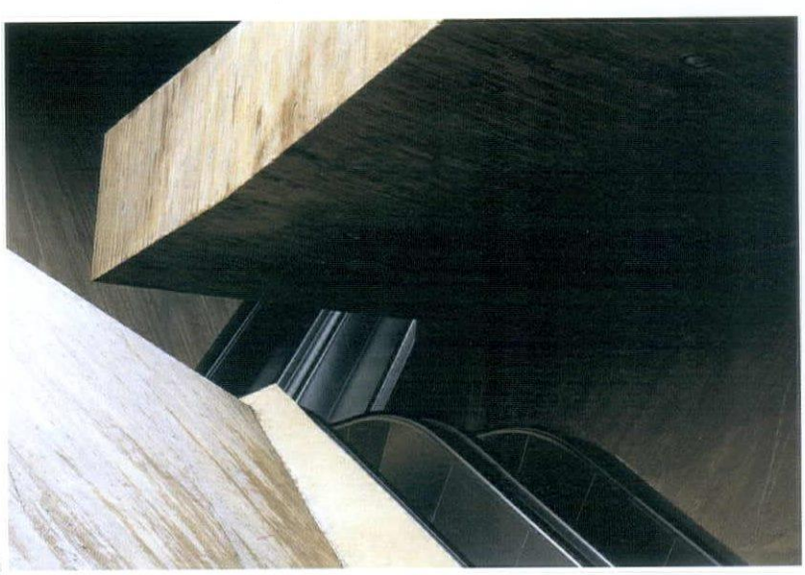
4

External Staircase, Toledo, Spain

Architect

Lapeña & Torres

3
The belvedere frames stunning vistas of the Tagus plain.
4
Angular concrete planes enclose and define the various levels.
5
The rich red ochre recalls the traditional earthy colours of Toledo's historic buildings.



5

GLORIOUS GOODWOOD

One of England's most delightful and rural racecourses has been transformed with a new, summery and light-hearted back-of-house.

As all aficionados of Dick Francis know, parading horses both before and after they run is part of the ritual of racing: before, you go to look at form, to assess which horses are likely to be ahead of the rest; afterwards, the winning animal, its jockey, owner and trainer are all fulsomely congratulated in the winners' enclosure. So parade ring and enclosure are essential parts of the racing complex. But they are often not clearly related to the course itself, nor to the grandstand. For the unaddicted, they can be quite difficult to find, and are frequently not very well arranged for proper inspection of the horses, or celebration of victory.

The new arrangements at Goodwood, one of Britain's most prestigious racetracks, could set a standard for many others. The Hopkins practice was asked to rationalize a typical messy back-of-grandstand in which the flow of people from stand to ring was obstructed by the weighing-in building (the place where the weight of jockeys is measured, so that the handicaps can be worked out).

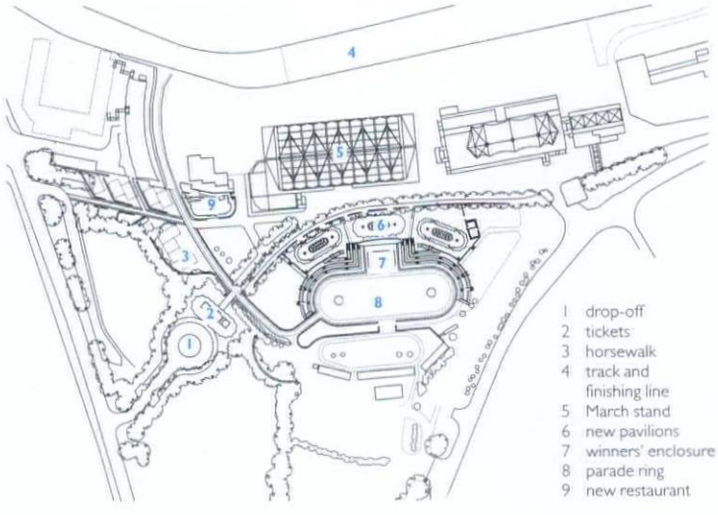
Now, the whole layout has been reorganized: there is a new entrance and drop-off point, a new ticket office and meeting room. Weighing facilities have been moved under the central pavilion of the three new structures that overlook the ring and focus on the enclosure. A terraced mound has been created from which you can see the parading people and horses, smell the sweat and dung, feel the tension of the race about to happen and the ecstasy of the winners. The BBC has a new suite with commentary platform, built as the retaining structure under promenade level, that links grandstands and the top of the terraces.

The new building complex floats to the south of the main



1

Looking north from parade ring towards the three new pavilions and main grandstand behind: the March stand, named after the Earl of March who owns Goodwood.
2
Intimacy of parade ring.



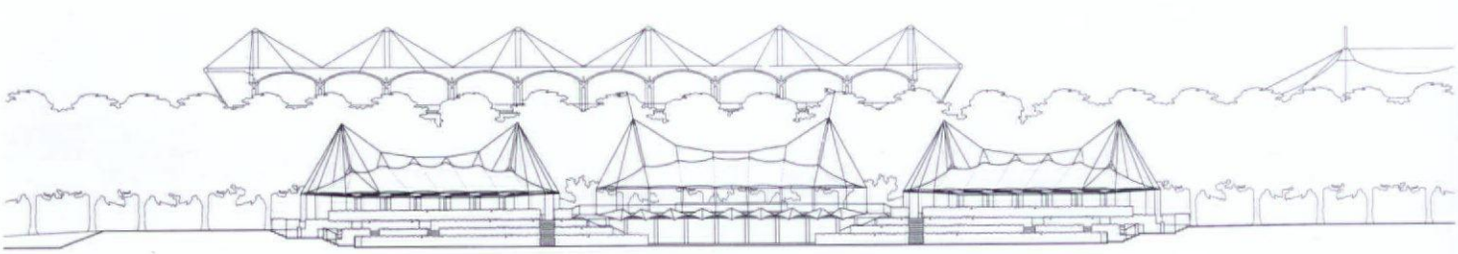
site plan



Horse-racing complex,
Goodwood, Sussex
ARCHITECT
Michael Hopkins & Partners

3

HORSE-RACING COMPLEX, GOODWOOD, SUSSEX
ARCHITECT
MICHAEL HOPKINS & PARTNERS

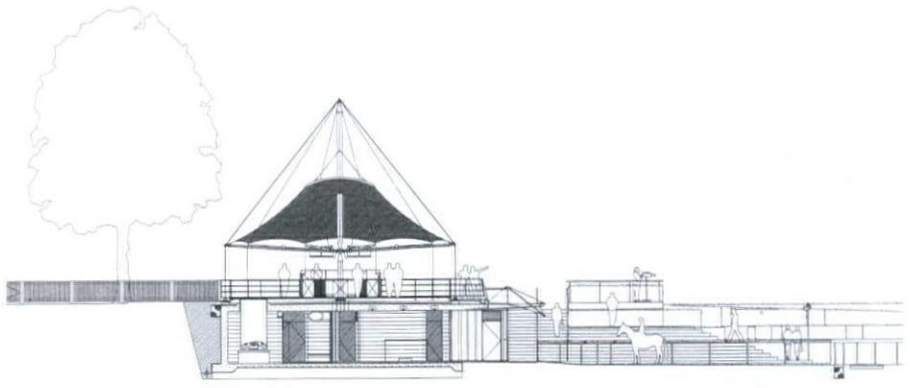


elevation from south, with March grandstand behind the three pavilions

(March) grandstand, built by Howard Lobb in 1980. The old entrance next to the grandstand has been replaced by a new restaurant which has splendid views of the members' lawn and the horsewalk which connects parade ring and track. Echoes of the Lord's Mound cricket stand (AR September 1987) reverberate through the new pavilions. Here again is the notion of evoking the ways in which traditional English grass sports were originally viewed: from the shelter of tents. Here again is the principle of masts supporting floating membranes (in this case PVC), with as little structure as possible at the edges to prevent views being obscured.

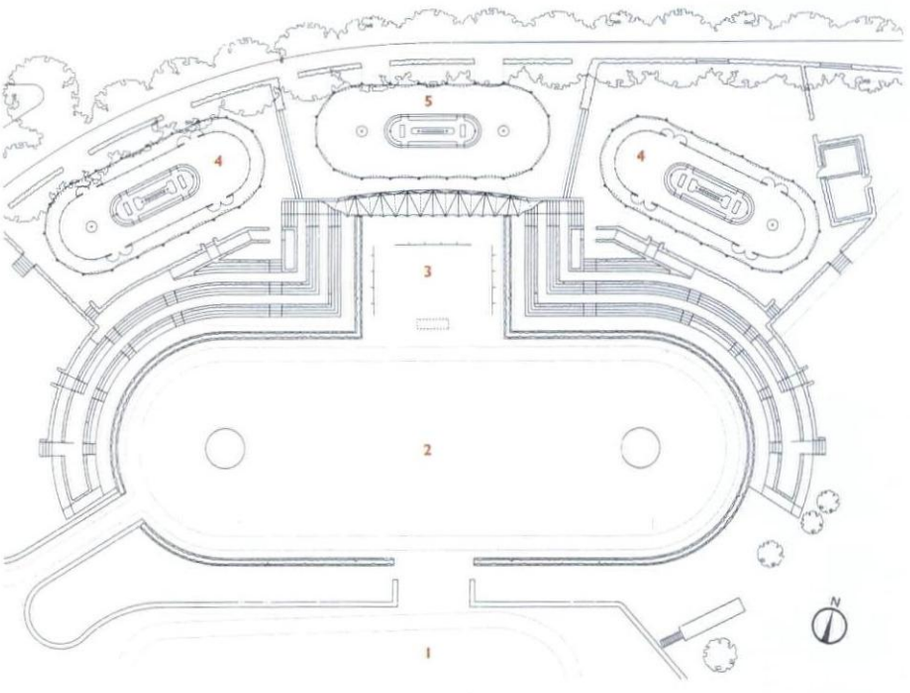
Plans of all pavilions are the same, with a central bar or servery surrounded by tables, and balconies overlooking the green space. East and west pavilions have glass wind-protection screens. The middle one is entirely open – here the tables are tall, for standing-up eating and there are breathtaking views down to the enclosure, and over that and the beautiful green countryside to Chichester Cathedral and, in the distance, the blue sea. In fact, the pavilions are to be used for only about 22 days in mid-year, and their hats are an evocation of happy, convivial summer days. They are light-hearted, and evoke both the excitement of the races and the happiness of the rare sun in England's cloudy climate. MARY SUMMERFIELD

Architect
Michael Hopkins & Partners, London
Project team
Michael Hopkins, Edward Williams, John Ridgett, James Reader, Carsten Czaja, Ashu Chathley
Structural and services engineer
Ove Arup & Partners
Photographs
Nigel Millard, 1
Morley von Sternberg, 2, 3, 4



cross section of central pavilion

1 pre-parade ring and stables
2 parade ring
3 winners' enclosure
4 pavilion
5 central pavilion and weighing-in building under



plan (scale approx 1:1000)



3
Central pavilion overlooking the winner's enclosure.
4
West pavilion, like east, has glass windscreens and is laid out as a conventional restaurant round a servery.



1

SPORTS COMPLEX,
MARSEILLES, FRANCE
ARCHITECT
RÉMY MARCIANO

1
Responding to shed vernacular of region, with walls of precast panels of different shapes and colours.
2
Approach to entrance down bisecting path between gym and changing block.

BOULES ET GYM

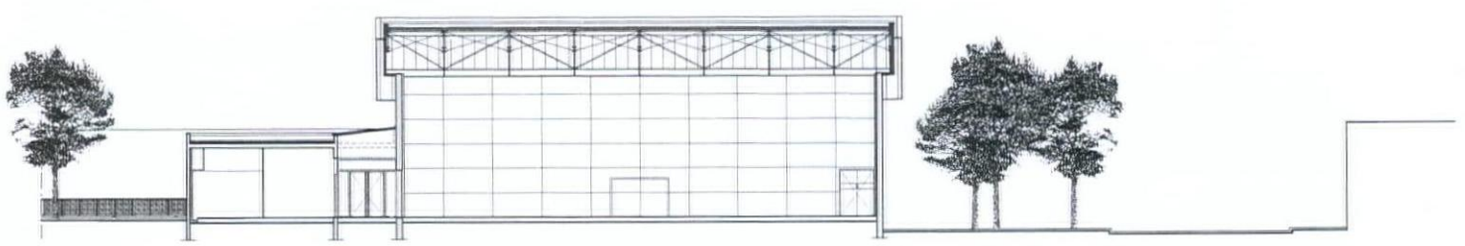
This gymnasium was built economically, yet it responds to its setting and incorporates ingenious lighting ideas.

The Ruffi sports complex, by Rémy Marciano, fills out a rectangular site in the third arrondissement of Marseilles, on the north side of the city's harbour. The immediate environs are a mixture of the semi-industrial and housing estates. To the north-west is the church of St Martin. Underneath is the tunnel for a new freight train line, part of a larger programme to improve the city's transport.

Marciano's complex, too, is part of a larger improvement scheme, this time to revitalize the area. As well as a large and elegantly enclosed gymnasium building measuring 24 x 44m in plan and 7m high, the site incorporates adjacent changing rooms, courts for outdoor sports such as hand- and basketball, a garden and two plots of rough ground for the popular game of *pétanque*, the Provençal name for *boules*. The complex supplies local residents with much-needed facilities, is a new dynamic force in the neighbourhood and a harmonious open space.

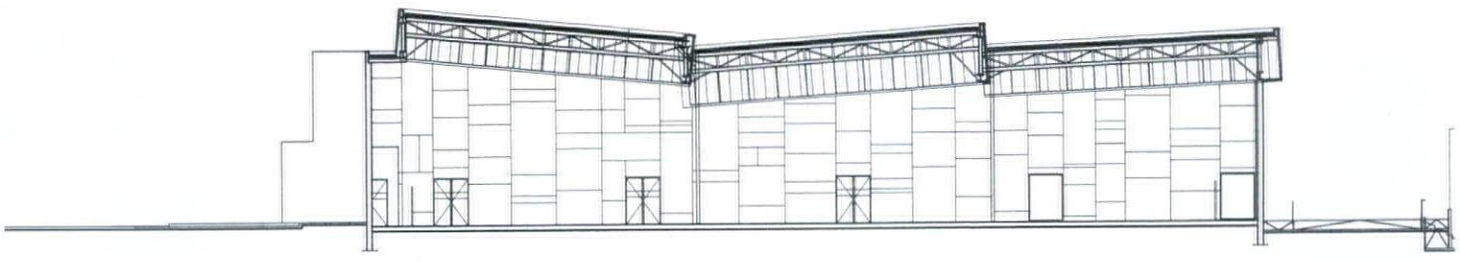
The various parts of the complex are disposed on either side of the site's main axis. This continues that of the church nave and is traced by a bisecting path that runs between outdoor courts to the gym and changing rooms on the south-east corner. As you look down the path from the gym's entrance, the church is framed by the buildings, the connection subliminally registering the conjunction of Marseilles's traditional Latin roots and its vigorous sports culture.

As a building, the gym, which contains three indoor courts, is a response to the semi-industrial, shed vernacular of the region and is a powerful blocky presence in the midst of anonymous housing. For practical reasons (to contain the balls), and for privacy, the main envelope is solid and textural, composed of a patchwork of concrete panels of different sizes and colours. This opaque base is surmounted by three interconnecting light boxes running across the structure's

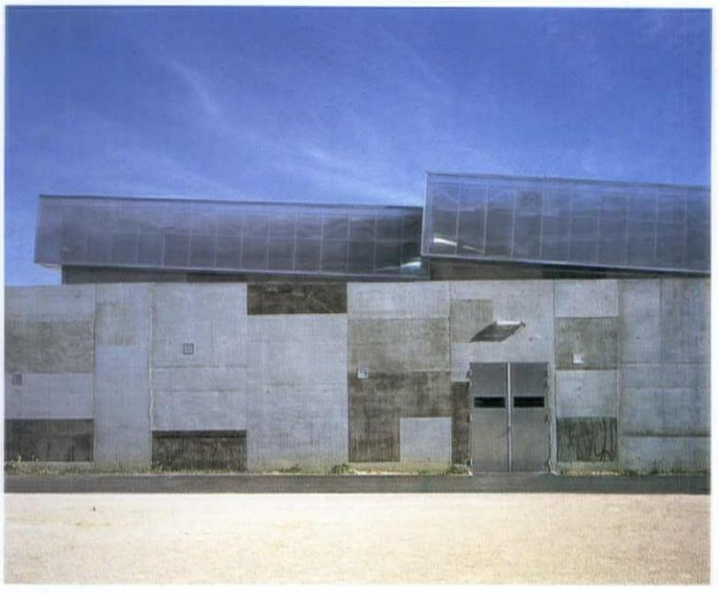


 cross section

2



long section

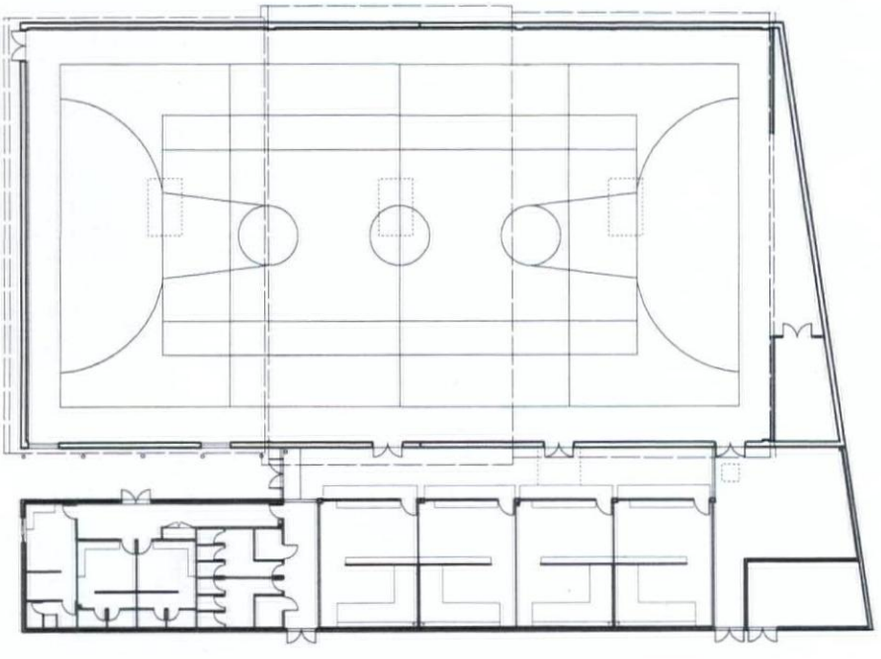


3

main grain, each indicating the court inside and each set at a different angle so that the building's silhouette has great sculptural presence. At night, the light boxes, overshooting the long walls on both sides, wash the walls with luminance so the building becomes an extraordinary beacon.

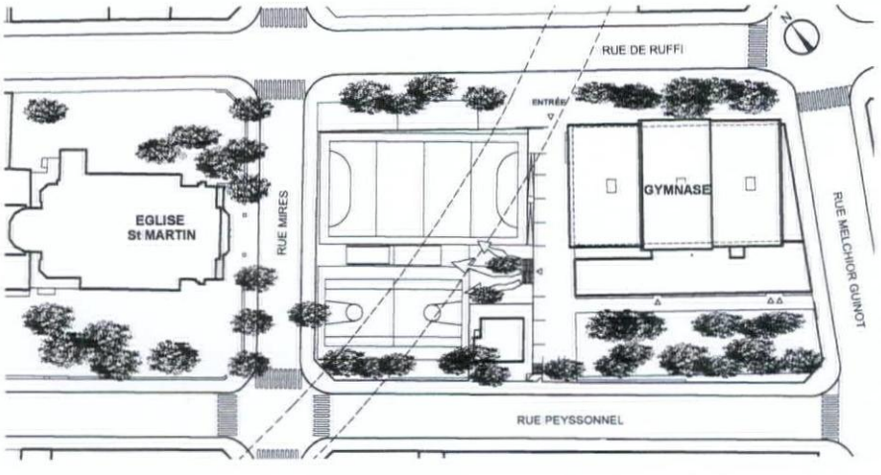
BEN AZULAY

Architect
Rémy Marciano, Marseilles
Consultant
ART'M Architecture, SP21, Société Phocéenne d'Ingénierie
Landscape
Jérôme Mazas
Photographs
All photographs by Philippe Ruault apart from 2 and 4 which are by Christian Michel/VIEW



ground floor (scale approx 1:500)

3
Three great light boxes carrying clerestories ...
4
... fill the interior with carefully controlled light.
5,6
Reflective stainless panels in upper parts of walls are intended. to prevent glare occurring between transparent clerestories and opaque walls.



site plan

SPORTS COMPLEX, MARSEILLES, FRANCE
ARCHITECT
RÉMY MARCIANO

4

5



6





1

TIMBER LAKE

Touching the earth lightly, this small building shows love of the forest and understanding of the sensual potentialities of wood: olfactory, tactile and visual.

SAUNA, MUURAISSAARI ISLAND, FINLAND
ARCHITECT
SARI KNUUTI (LANDSCAPE ARCHITECT), TEEMU TUOMI (ARCHITECT)

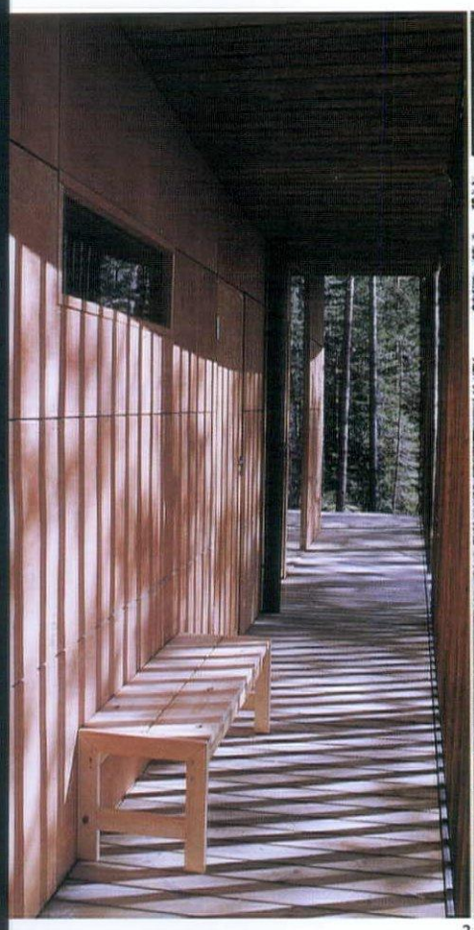
The little sauna on Muuraissaari Island on a lake near Luumäki in eastern Finland is by architect Teemu Tuomi working with landscape architect Sari Knuuti. It is beautifully sited in the pine forest on a boulder-strewn south-facing slope overlooking the water.

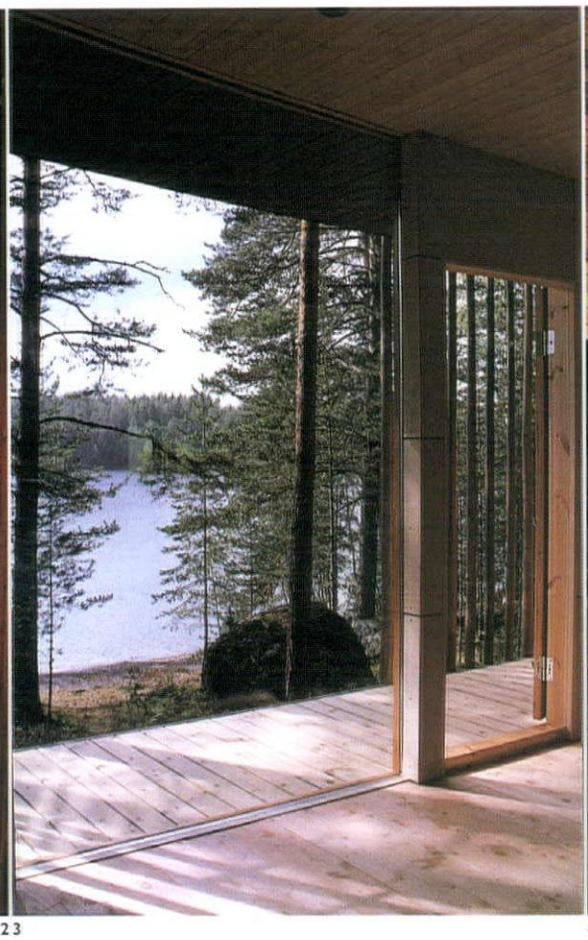
The designers were keen to respect the natural landscape, and their most immediately obvious response is on the grilles on the north and south sides of the verandah which are formed of stripped spruce poles set at 150mm centres. The walls of the building proper are clad in reddish brown plywood, and the designers hope that as the spruce poles weather grey, they will echo the colours of the lower parts of the surrounding pine trunks, while the ruddier ply will evoke tints of the bark on the upper parts of the trees.

The verandah, which surrounds the whole building, is a device for increasing effective floor area from the very small amount allowed by the planning authorities, but it is more than that. It acts as an intermediate space between the natural world and the artificial, and its effects of light and shadow, transparency, translucency and even opacity alter constantly with weather, time and season. From the sitting room (the place where you go after the sauna to relax, eat and drink) there is a magnificent view of the lake through a double-glazed floor-to-ceiling window. The bathroom has a low level window so that, when sitting on the benches, you can look out over the water through the grille. But it is fundamentally a dark space, as northern steam baths have always been.

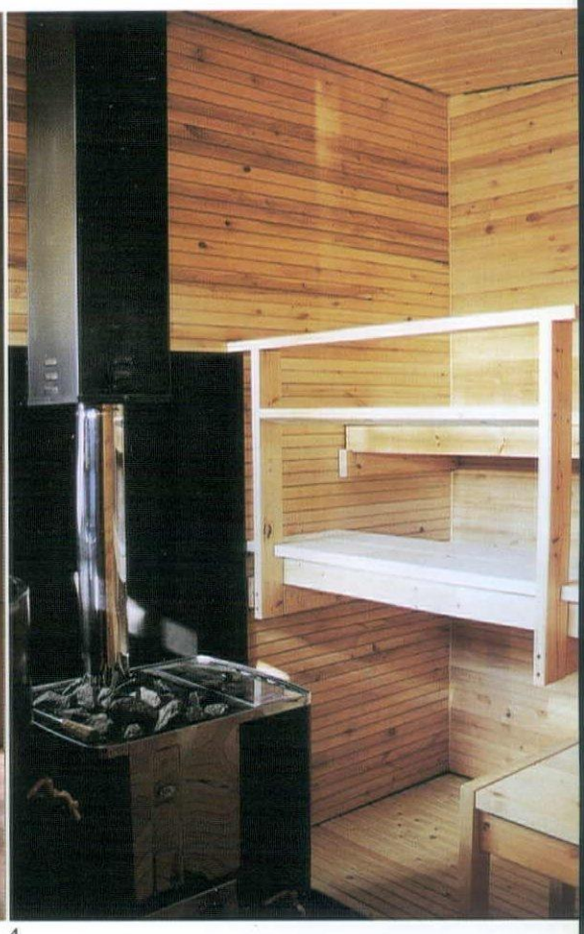
The architects have celebrated the scents, colours and textures of wood. In the sauna, walls are clad in reddish alder, with floor and ceiling of pale spruce and benches of aspen. In the sitting area, reddish Oregon pine floors contrast with smooth light pine plywood walls and the texture of a fine-sawn spruce ceiling.

The building touches the earth lightly, with its platform supported on steel stub columns that bear directly onto the rock. My only reservation is about the concave roof, which seems both unnecessary and potentially troublesome. H. M.





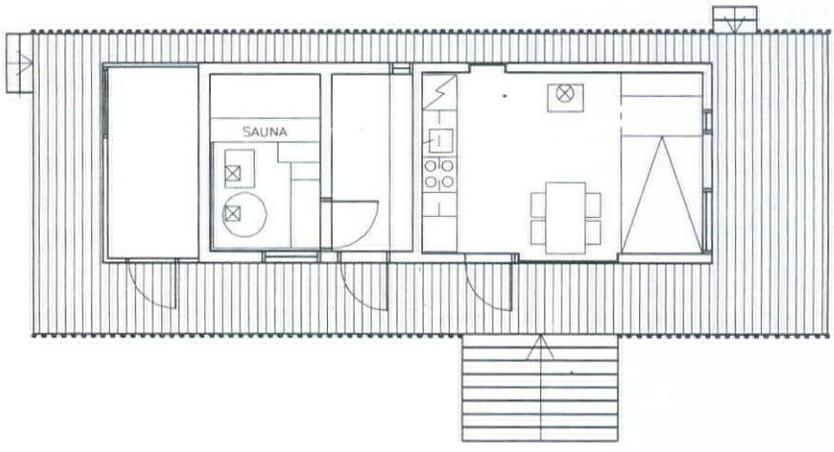
2 3



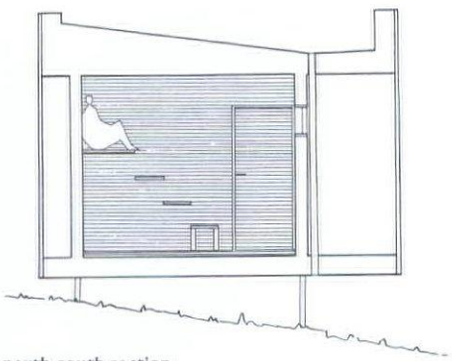
4

Architects
Sari Knuuti (landscape architect),
Teemu Tuomi (architect)
Carpenters
Jouko Loisa, Timo Nuppola

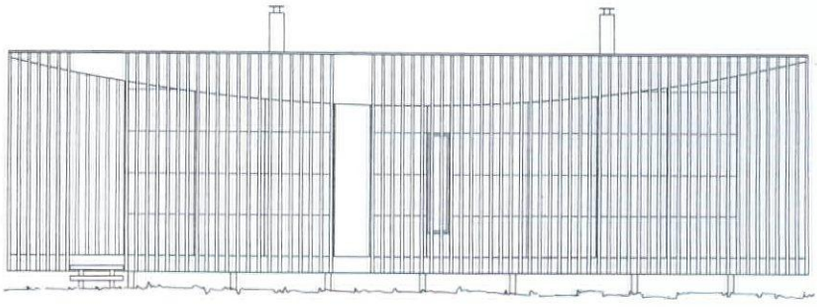
1
House hovers over slope on short steel stub columns.
2
Large poles, like those used by Aalto in the porch of the Villa Mairea, filter light to verandah.
3
Opening to the lake, but ...
4
... dark in the sauna's steam.



plan (scale approx 1:130)



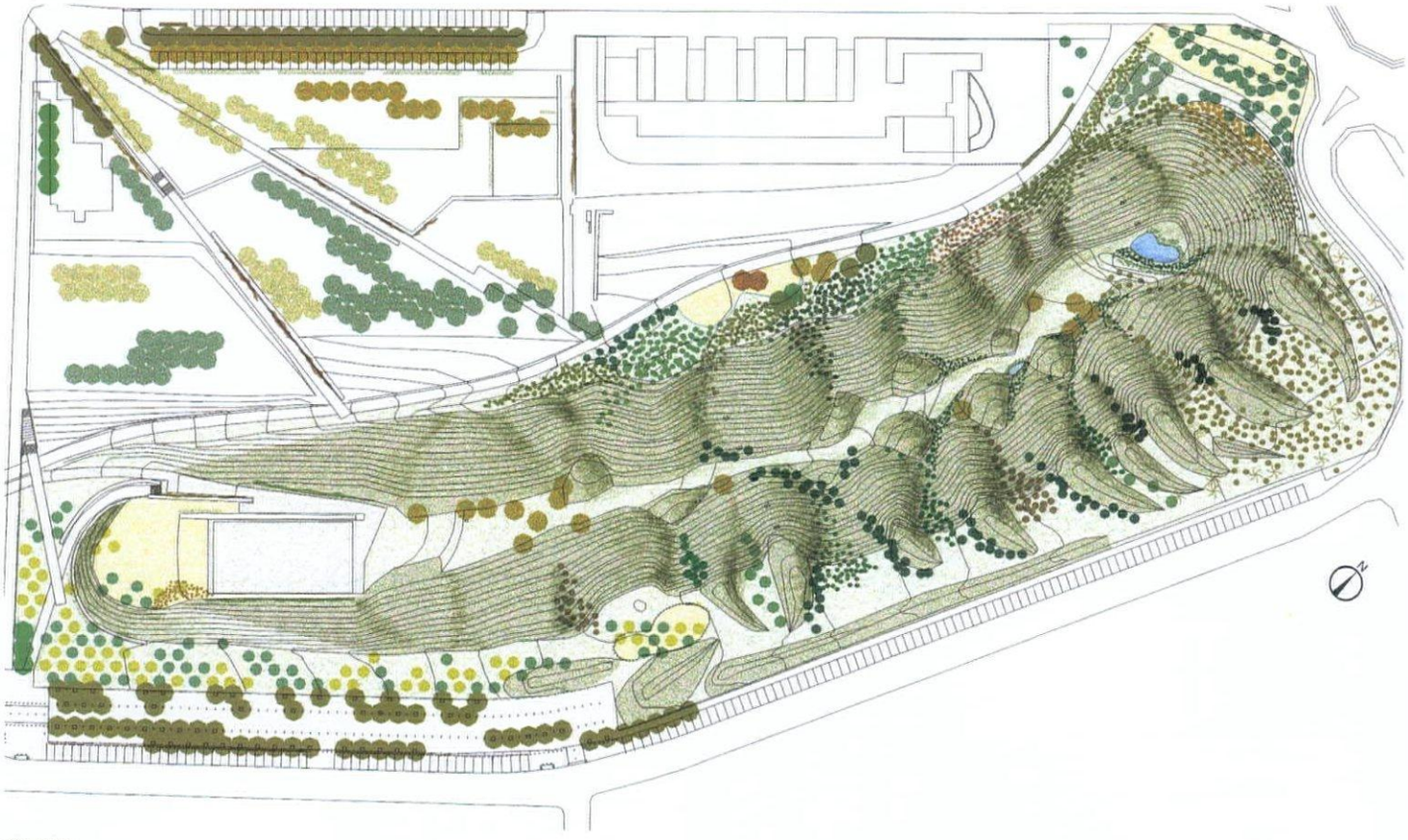
north-south section



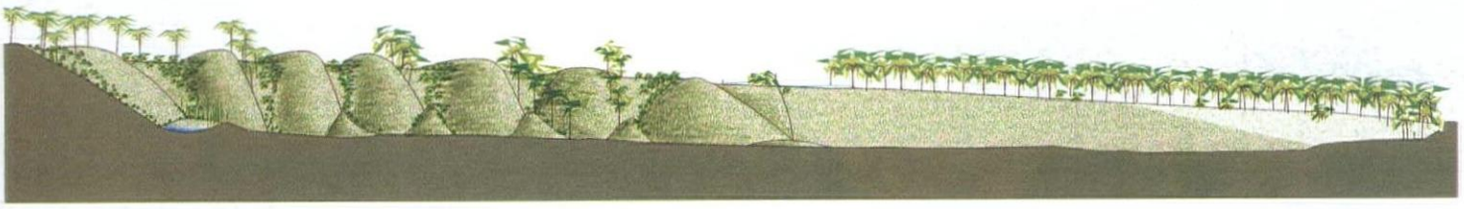
north elevation

Park, Barcelona, Spain
Architect
Manuel Ruisánchez

1



66 | 2 site plan



site section

Fontsanta Park is a conglomeration of imaginative public spaces grafted on to the dried-up riverbed of the former Fontsanta River. The riverbed separates an industrial area from a recently developed residential quarter on the outskirts of Barcelona. Such sites are considered unsuitable for urbanization and instead are regarded as green belts, with the potential for development as public parks and open space. Barcelona's civic authorities have an enviable record of putting neglected land to good use (see for instance, Miralles and Tagliabue's Parc de Las Colores; AR January 2002) and in 1994, held a competition for proposals to transform the site into a park. This was won by Manuel Ruisánchez and since then, the project has been gradually implemented in stages, finishing in 2000.

Prior to its redevelopment, the riverbed had been used as a rubbish tip generating an irregular, undulating topography with changes in level of up to 30m. The project advocates two basic kinds of intervention: manmade terraces contained by gabion construction address the challenges of the terrain and create space for intensive use, while newly planted tracts of maple and ash will develop into mysterious bosky glades. In the western part of the park, the gabion terraces enclose public sports fields. To the east, a zig-zag pathway traces the course of the original riverbed.

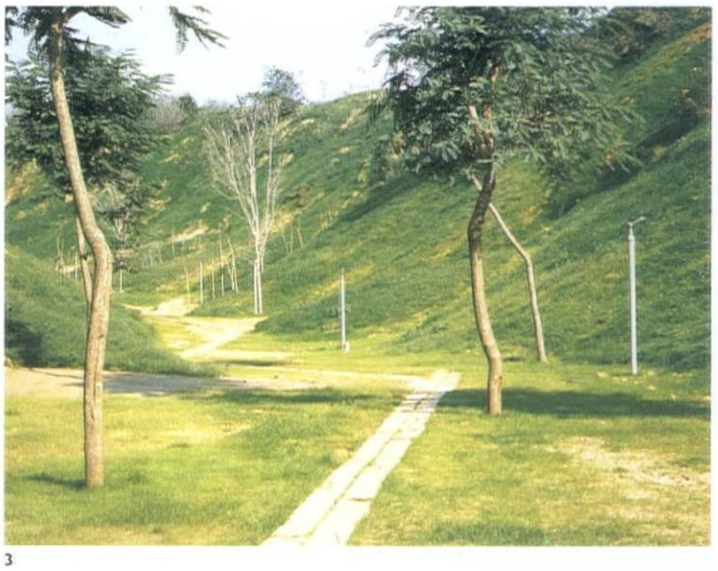
The rubbish tips have been stabilized by unloading earth over the sides of the ravine to form wedge-like slopes, recalling the tumbling debris. The analogy is emphasized by massed planting that also seems to cascade down the slopes, accumulating at the bottom following the gullies created by heavy rainfall. Ravines are typically places of extreme climate conditions, ranging from protracted periods of drought and intense sunlight, to high flooding and levels of humidity. The choice of elm, gorse and mimosa reflects these extremes and reinforces the vegetation already present. Willow, olives and tamarind are also introduced as all are species that thrive on riverbanks. Robinia and vines are well adapted to embankment settings and large areas of grass also hold the soil in place to prevent further erosion of the surroundings.

Guided by principles of restoration, but also full of subtle new interventions, Ruisánchez's scheme recalls and reconstructs the various incarnations of the site, transforming a disregarded urban wasteland into a distinctive new public park. CARLA BERTOLUCCI

Architect
Manuel Ruisánchez, Barcelona
Project team
Manuel Ruisánchez, Xavier Vendrell, Manuel Colominas



2



3

Riverbed revival

Set in the neglected carcass of a dried up riverbed, this new public park is full of subtle and inventive new landscape devices that respond to the site's history.

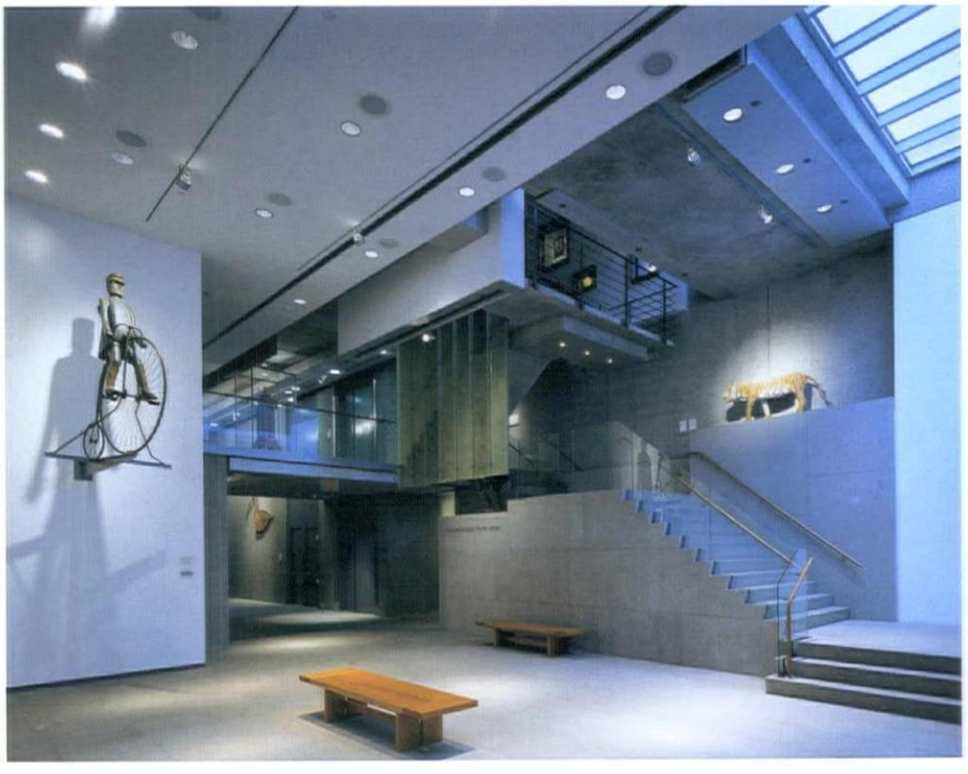
1
A boardwalk path zigzags along the bottom of the gully, tracing the course of the original riverbed.
2
Gabion terraces enclose new public sports fields.
3
Newly planted trees will evolve into bosky glades.



1

The new Museum of American Folk Art is housed in an eight-storey building, by Tod Williams Billie Tsien & Associates, at 45 West 53rd Street in the heart of Manhattan. This is the first new museum in the city since the Whitney opened in 1966, and is also the architects' first important civic building in New York City. As a museum, it provides a permanent home for the study and appreciation of a vital art that is eloquent of America's cultural diversity, of its varied history and traditions. Artefacts – created out of materials to hand and, often, at critical moments in American history – testify to the personal creativity and communal effort that laid the foundations of American statehood.

Long and thin – only 12.2m wide – the museum faces an open piazza so that it can be seen full-frontal from 52nd Street. It is flanked on three sides by sites owned by the Museum of Modern Art. In consequence, its exterior (not quite completed) is an assertion of its independence from MoMA and of its presence in the city. The building is clad with panels of Tombasil (a form of white bronze) which is used for fire nozzles and

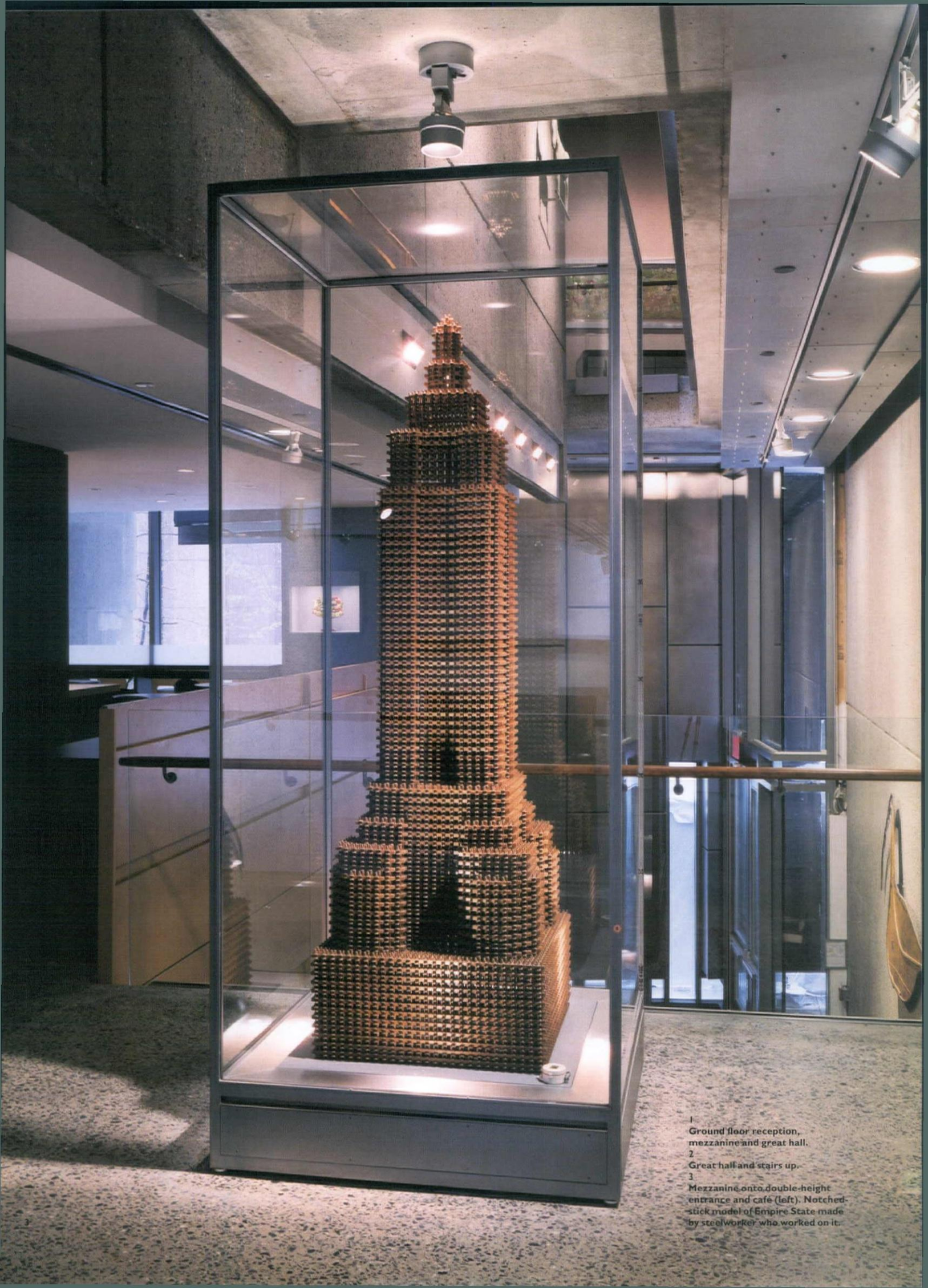


2

MUSEUM OF FOLK ART,
NEW YORK, USA
ARCHITECT
TOD WILLIAMS BILLIE TSIEN
& ASSOCIATES

CITY FOLK

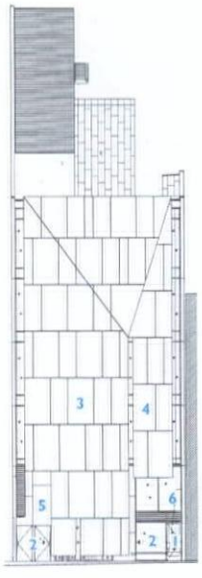
Exuding a rugged, sculptural power through form and materials, a museum of folk art in Manhattan is a luminous backdrop for the exhibits.



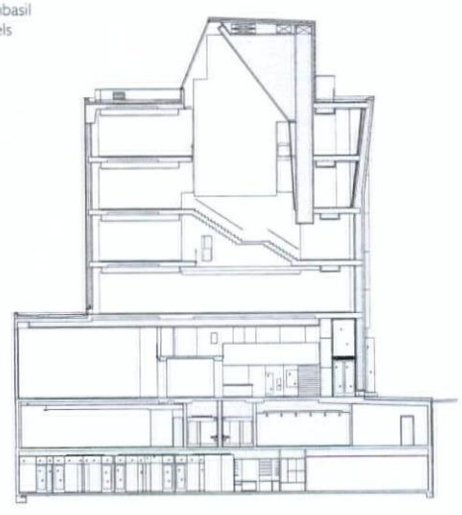
1
Ground floor reception, mezzanine and great hall.
2
Great hall and stairs up.
3
Mezzanine onto double-height entrance and café (left). Notched-stick model of Empire State made by steelworker who worked on it.

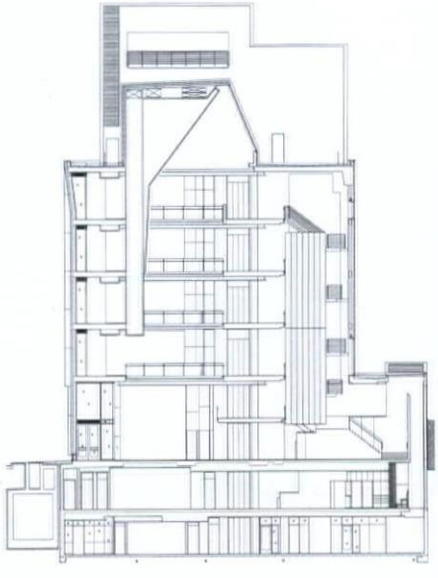
Museum of Folk Art, New York, USA
Architect
Tod Williams Billie Tsien & Associates

4
Material pleasure; impeccable detailing as if hand-finished: cherrywood handrail, warm against concrete and glass, riveted translucent screen, slender gallery balustrading.



1 museum shop entrance
2 main entrance
3 steel cast Tombasil
4 concrete cast Tombasil
5 stainless steel panels
6 pyramidal skylight

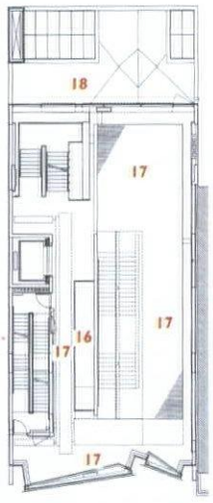




south elevation

long north-south cross section

long south-north cross section

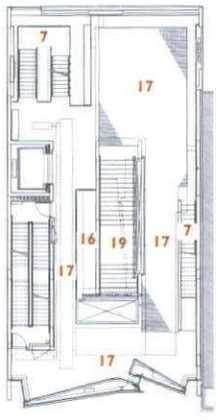


first floor

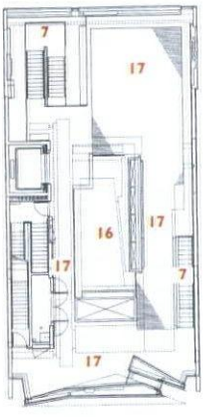


second floor

1 entrance foyer
2 fire stair
3 shop
4 reception
5 office
6 great hall
7 ornamental stair
8 library
9 rare books
10 lecture room
11 audio-visual
12 auditorium
13 cloakroom
14 mezzanine bridge
15 café
16 void
17 gallery
18 outdoor terrace
19 ceremonial stair



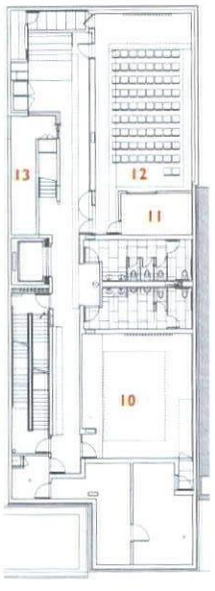
third floor



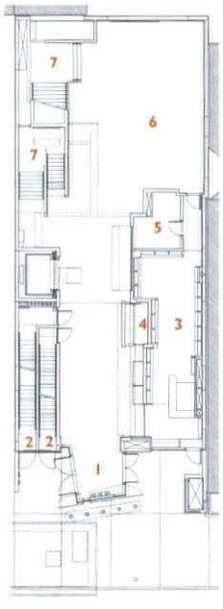
fourth floor



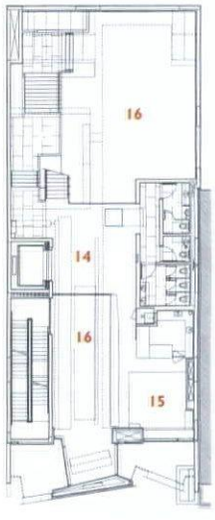
lower level 2



lower level 1



ground floor (scale approx 1:500)



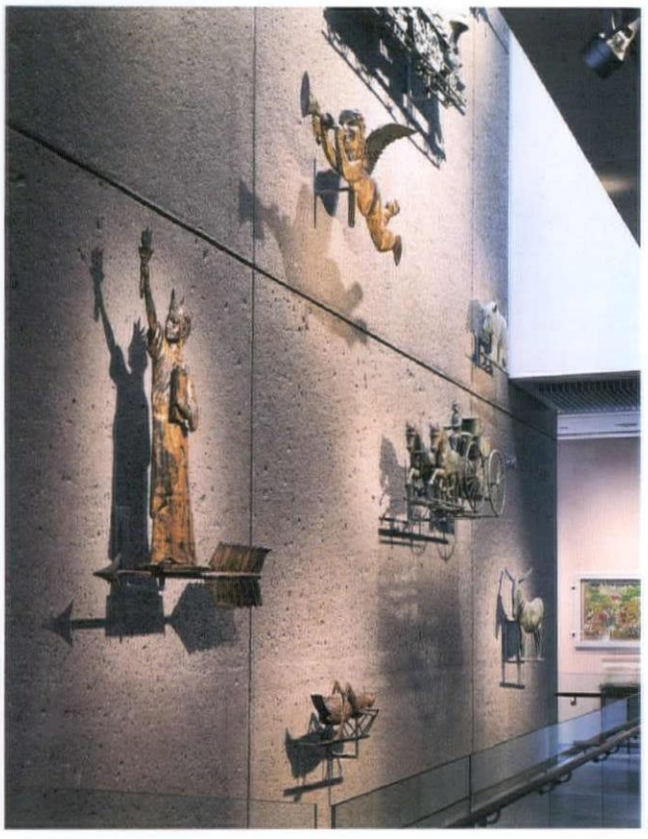
mezzanine

ship propellers and has never before been used architecturally. Panels are textured, their variations made deliberately by using steel or concrete moulds, and their fissures a natural consequence of the casting process: each one is different. Catching the glow of morning and evening sun, the building's exterior changes with weather and seasons. The front south face itself is a faceted, sculptural composition of changing light, folded slightly in an echo of origami.

Inside the museum, exhibits range from objects drawn from the traditional folk art – paintings, sculptures, weathervanes, flags, quilts – of the eighteenth and nineteenth centuries, to the works of contemporary self-taught artists. The four upper floors are devoted to galleries for permanent and temporary exhibitions. Collections are elegantly displayed by straightforward means in exhibition cases and in less traditional ways. Below the galleries are the ancillary facilities so essential to modern museums. A mezzanine level, between ground and first floor, contains a small coffee bar, and has views out to 53rd Street and into the main ground floor hall and two-storey atrium. Underneath it, next to the reception is a museum shop (open outside museum hours and reached by a separate door). In the upper basement are an auditorium, lecture hall, lavatories and cloakroom; and below, a library, rare books room, audio-visual facilities, offices and plant rooms. In general, the west side of the building is lined by services such as a fire stair, lift and stairs.

But in other respects, design refers to the grand traditions of nineteenth-century galleries like the Soane Museum. The museum is capped by a skylight over a grand central staircase, washed in light, leading from second to third floor. Openings on each level allow natural luminance to filter into galleries and down to the lowest levels. Sectional changes subtly enlarge space, and progress through the building is enlivened by devices that allow you to see the same object from different angles, to see through a dividing wall from one gallery to another, to look from level to another. Objects mounted in niches throughout the building or on walls lining the light slots provide a continually changing landscape and recall the ways in which progress was often enriched in the old museums. The result is a museum that feels very much larger than it is.

Materials and their coexistence are a continual source of pleasure. Floors are the simple slab, terrazzo ground, and Ruby Lake Fir. Set against the toughness of

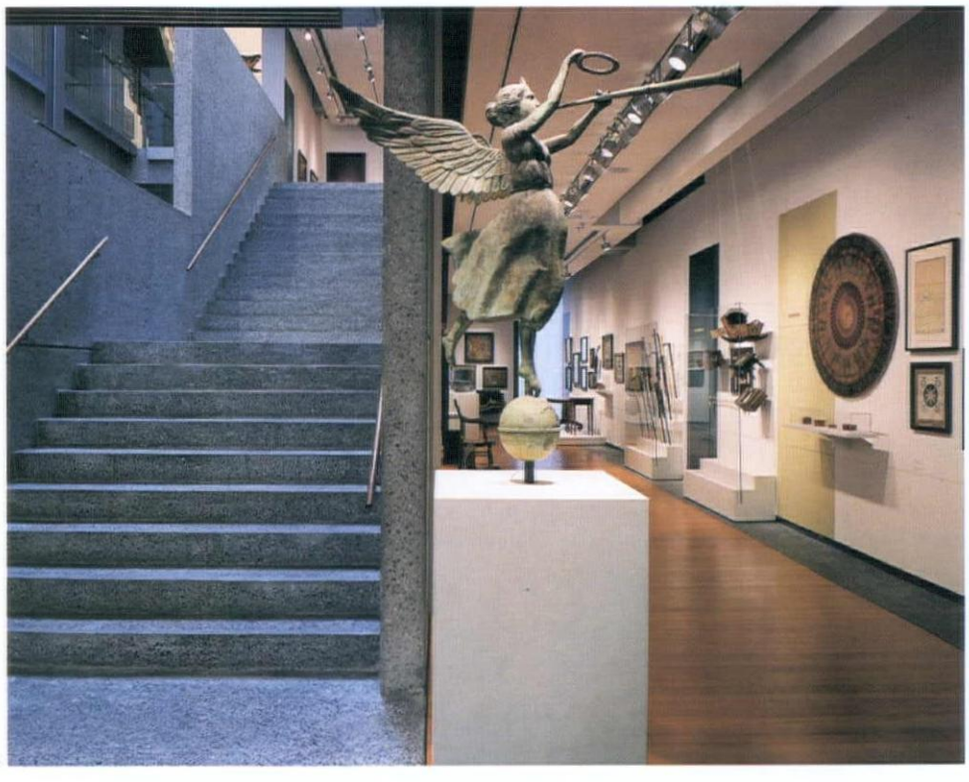


5

concrete (bush hammered in places) the Fir boards, up to 5m in length, are opulent. Other notes, warm against glass and concrete, are added by cherrywood handrails, and furniture designed by the architects and made by a Japanese American cabinet maker.

In a review of a Williams and Tsien house on Long Island (AR September 1999), Margaret Seal observed the architects' 'careful and intelligent use of materials and craftsmanship in pursuit of a gentle, sensuous and thoughtful arrangement of spaces revealed by light'. They are, she continues, 'undoubtedly American in the range of their responses to the very different cultures, climates and landscapes of their country'.

The truth of these observations is borne out in previous works, each with its special relationship to the context. Design of this museum celebrates with grace, without pomposity or condescension, the inventions of ordinary people. And, by the manner in which the objects are displayed and illuminated, it acknowledges the powerful fascination of folk art. PENNY MCGUIRE



6

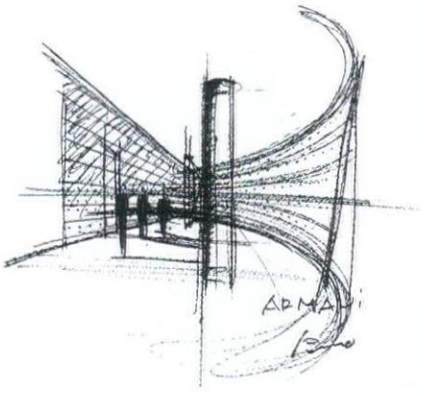
Architect
Tod Williams Billie Tsien & Associates, New York
Project team
Matthew Baird (project architect), Phillip Ryan, Jennifer Turner, Nina Hollein, Vivian Wang, Hana Kassem, Kyra Clarkson, Andy Kim, William Vincent, Leslie Hansen
Associate architect
Helfand Myerberg Guggenheimer Architects
Project team
Peter Guggenheimer, Jennifer Tulley, Jonathan Reo
Designer (permanent collection and inaugural exhibitions)
Ralph Appelbaum and Associates
Photographs
Peter Mauss/ESTO

MUSEUM OF FOLK ART, NEW YORK, USA
ARCHITECT
TOD WILLIAMS BILLIE TSIEN & ASSOCIATES



5
Objects mounted on great concrete wall lining light well are given presence and dignity.
6
Ceremonial stairs of blue black terrazzo from second to third floor. Salvaged gallery flooring of Ruby Lake Fir with exceptionally tight grain and warm colour.
7
Underside of ceremonial stairs and void down to first floor. Glazed slot gives glimpse of second floor gallery.





CONCRETE COUTURE

A former chocolate factory in Milan's industrial quarter has been magically transformed into a setting for the spectacle and business of haute couture.

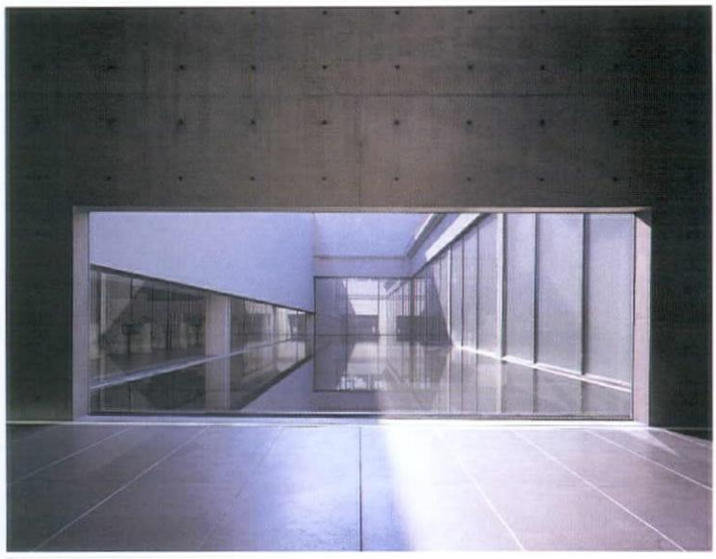
COUTURE HOUSE,
MILAN, ITALY
ARCHITECT
TADAO ANDO

Milan is reverting to what it must have been in the centuries before Italian unification, a city state of private wealth and public squalor, in which ubiquitous graffiti and crumbling services crowd the privileged enclaves of fashion. One imagines that today's merchant princes have as little contact – or concern – with urban degeneration as their aristocratic forebears, but the art of patronage still flourishes. Giorgio Armani commissioned Tadao Ando to turn a former Nestlé chocolate factory into his world headquarters, with a theatre for fashion shows and other events. Two masters of rigour and restraint – one tailoring cloth to flatter the figure, the other deploying concrete masses in light as a setting for human activity – have found common ground. It was Armani who said, 'I want to create something as simple as possible but of lasting value, and I have always loved and admired the Japanese spirit in buildings', but the words would be equally apt for Ando. The product of their collaboration is a triumph of refined austerity.

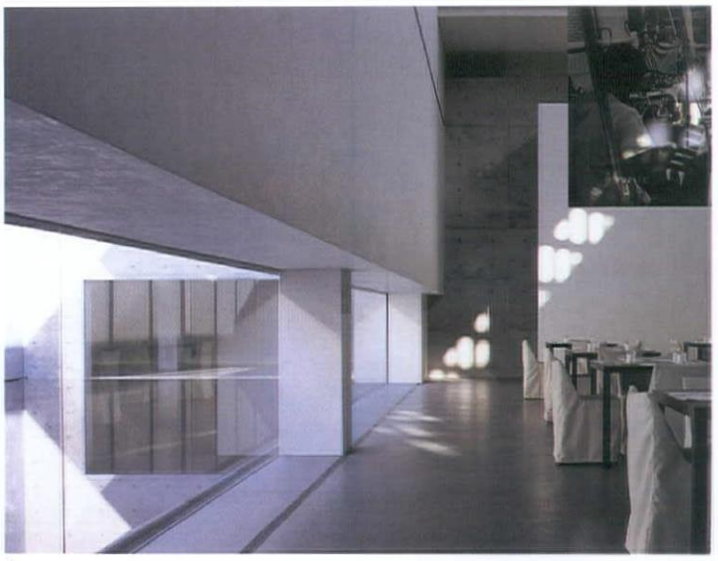
The low, greenish brick building is located in the Porta Genova district, which is slowly mutating from industry to arts, despite the proximity of a muck-filled canal. In a country fiercely protective of its past, even mundane facades are sacrosanct and the only outward evidence of transformation is a modest sign and some inset panels of translucent glass. One of these slides back to reveal a corridor, 100m long, that slopes gently up to the rear of the building. Polished stone pavers, Ando's signature concrete walls, and a white plaster ceiling seem to float clear of each other, held apart by narrow strips of concealed lighting at top and bottom. These are augmented by uplights in the row of slender free-standing columns that bisect this axis.

The first hint of the offices and showrooms concealed behind the walls comes near the end of the corridor where an expanse of glass frames a narrow interior court with a

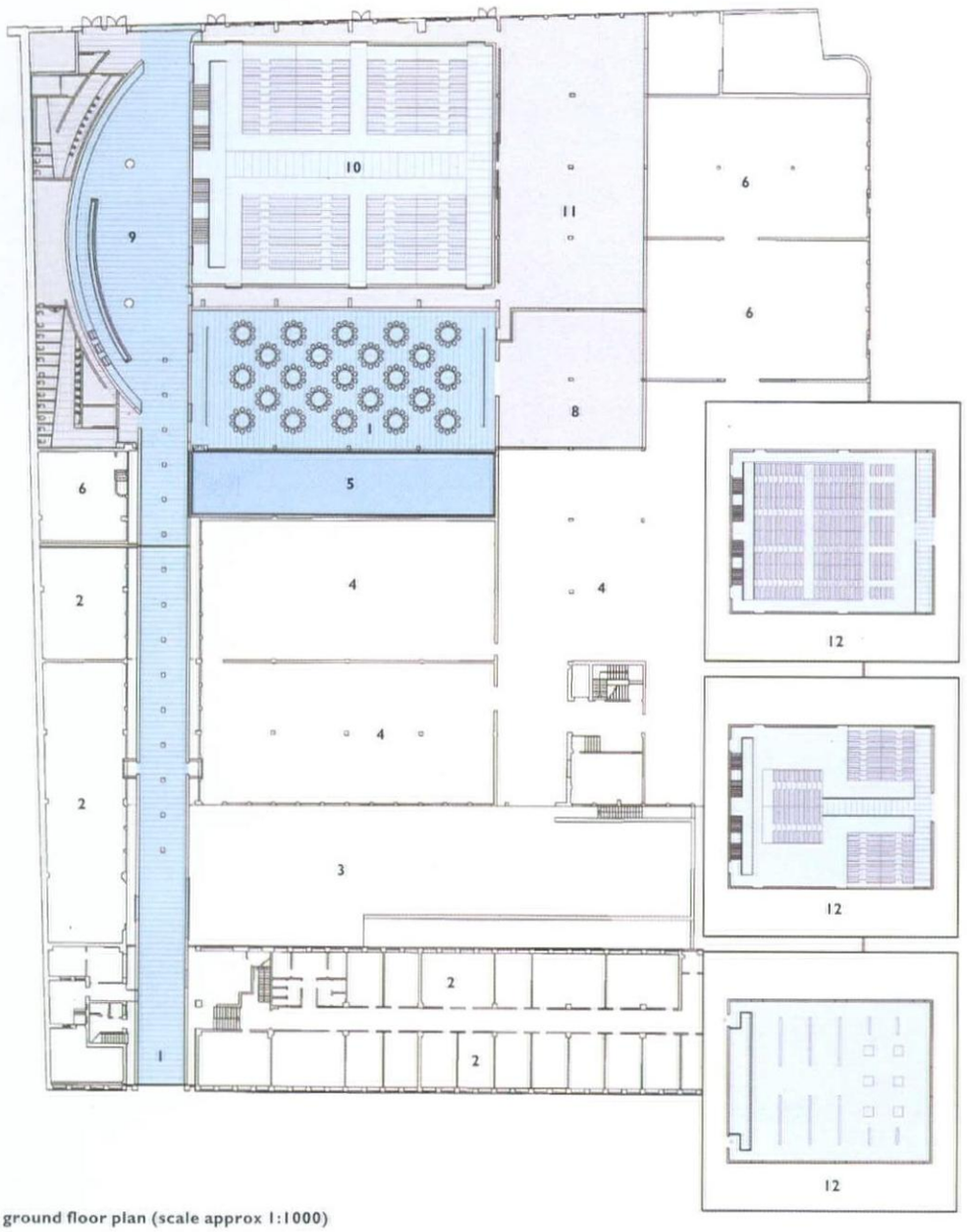
1
The processional corridor culminates in a semi-circular foyer enclosed by a curved and tilted concrete wall.
2
The stark surfaces of the concrete are washed by a gentle luminance.



3



4



1 entrance
2 offices
3 courtyard
4 showroom
5 water court
6 store
7 dining hall/gallery
8 kitchen
9 foyer
10 theatre
11 backstage
12 theatre configurations

COUTURE HOUSE, MILAN, ITALY

ARCHITECT

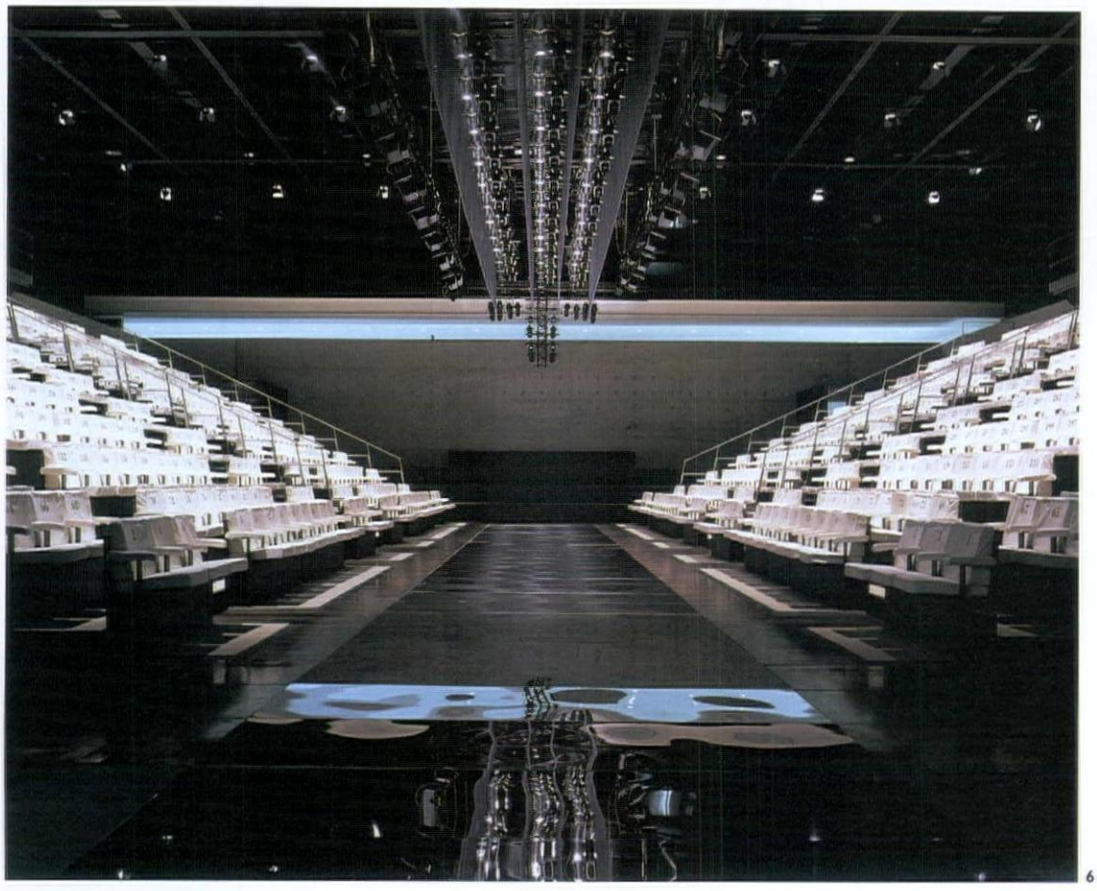
TADAO ANDO

3
Narrow interior courtyard is filled by a calm, sensuous pool.
4
Dining hall-cum-gallery overlooks the pool. Light dapples off the water, casting rippling shadows on the concrete.
5
Dining hall with its cut-away ceiling vault revealing a steel-framed butterfly roof, surviving fragments from the original factory.

 ground floor plan (scale approx 1:1000)







6

COUTURE HOUSE, MILAN, ITALY
ARCHITECT
TADAO ANDO

shallow pool reflecting light into the spaces that surround it. A dining room that doubles as a gallery and reception hall extends along one side of the court and this is lit from a long low window that draws the eye down to the water and the sandstone floor.

A cove-lit ceiling vault braced with polished steel rods is dramatically cut away to reveal a steel-framed butterfly roof and clerestory that survive from the original factory.

A curved and tilted concrete wall, washed by light from a recessed ceiling, defines a foyer at the end of the corridor and conceals the cloakroom and lavatories. Three blocks of backlit glass serve as reception desks. An etched steel door opens onto the black-box theatre, with its 682 upholstered armchairs mounted on dark wood bleachers flanking a polished metal runway that is intensively lit from above and below. During a fashion show, photographers are clustered on tiers beside the door facing the models as they emerge at the far end. Bleachers can be lowered and the seating reconfigured to accommodate conferences, performances, art installations and movies.

Ando has created an enduring frame for an icon of fashion and a stage for its votaries, while cleverly concealing the private domain of staff and buyers. Indeed, the whole complex is like a theatre, with an auditorium and expansive backstage area, and a corridor serving (like the grand staircase of La Scala) as a processional route on which the glitterati can preen and strut. It also demonstrates how this architect has reinvented the traditional Japanese aesthetic of light and shade, offering linear progression through a walled labyrinth, guiding foot and eye, concealing and selectively revealing to build anticipation for the drama to come. Materials are plain, forms simple, but the effects are thrilling. From Buddhist temple to European fashion house, Ando finds a common thread between diverse cultures and patterns of human behaviour.

MICHAEL WEBB

Architect
Tadao Ando Architect & Associates, Osaka
Project team
Tadao Ando, Kulapat Yantrasast
Associate architect
Intertecno
Photographs
Richard Bryant/Arcaid

6
Black-box theatre with variable seating forms a stage for the display of haute couture.



SHOP AND SPA, NEW YORK, USA
ARCHITECT
ARO WITH AOSHI KUDO

Japanese lantern

A luminous skincare store and spa on Madison Avenue evokes the Japanese provenance of its products and is a lantern on the busy street.

1
Shiseido's glazed shop front onto Madison Avenue.



2

SHOP AND SPA, NEW YORK, USA
ARCHITECT
ARO WITH AOSHI KUDO

The Qiora Store and Spa on Madison Avenue was designed, by Architecture Research Office (ARO), to sell Shiseido skincare products in the most seductive manner possible. Shiseido is Japanese, and in their design of the store, the architects have alluded to the firm's provenance through abstraction: through clear simple forms and the ambiguity that, blurring boundaries, is created by the continual play between translucent and opaque, between light and shadow.

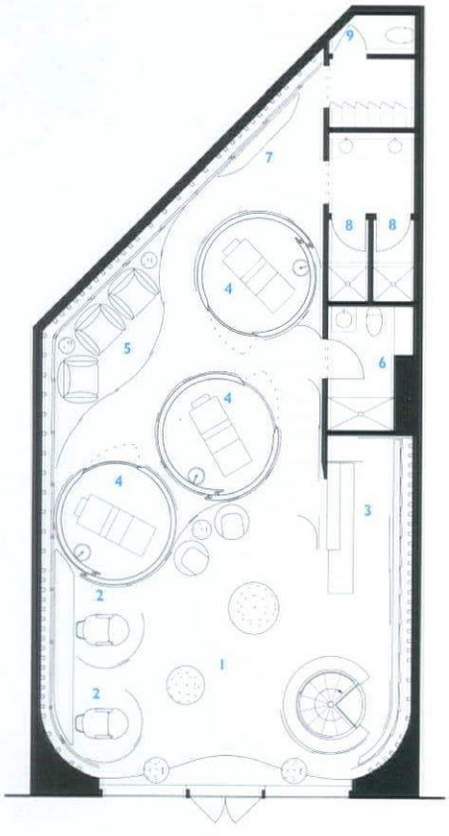
Apart from the service rooms ranged down the south wall at the back, everything is curved to make space flow within the lofty wedge-shaped interior. Three cylindrical cabins floating across the wedge mark an informal division between the retail zone at the front and spa at the back. Vertical hard surfaces are obscured by diaphanous veils of stretched organza and are used throughout the interior to form delicate collages of light and colour. In the retail zone, the fabric defines consultation areas and reception; within the spa, it shrouds the cabins and more intimate places for relaxation. Inside each cabin, opaque walls are lined with soft suede-like material.

Lighting has been considered an intrinsic part of design, as substantial an element as the materials. Dimmed and fabric-diffused fluorescents around the interior's perimeter are concealed so no fixtures distract the eye, and luminance, creating a radiant glow on the skin, induces the sensation of daylight. Elegant little bottles and jars containing lotions and potions are displayed on glass shelves, their minutely distorted forms suspended in light. During the day, the fibre-optic fittings emit changing shades of white. After dark, lighting and fabric become stained with blue.

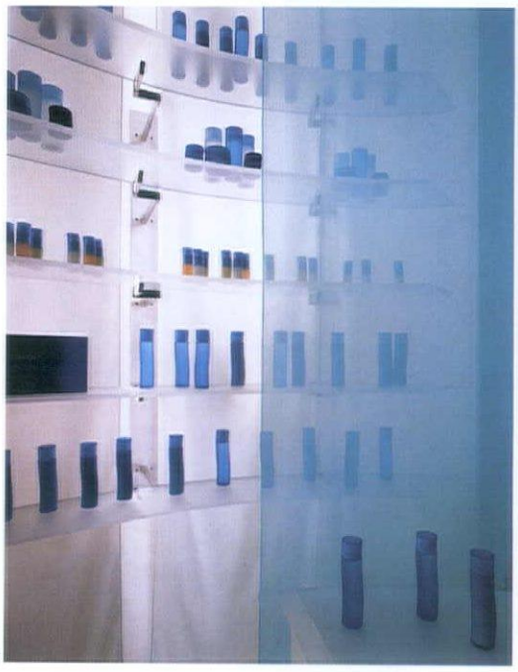
At night, the store becomes a lantern on Madison Avenue. Stepping through the door from the busyness and noise of the street you find yourself enveloped in a soft glowing interior and becalmed in light. P. M.

Architect
Architecture Research Office (ARO), in collaboration with Aoshi Kudo, designer and creative director, Qiora
Project team
Stephen Cassell, Adam Yarinsky, Scott Abrahams, Josh Pulver, Eunice Seng, Rosalyne Shieh, Kim Yao
Shiseido project designer
Rikya Uekusa, Shiseido Creative
Photographs
Reid Freeman, 1
David Joseph, 2, 3, 4

2
Retail zone and line of curved cabins screening spa at back. Fluorescent light.
3
Skincare products in shapely bottles and jars on glass shelves are suspended in light.
4
Gossamer panels screen cabins, define different zones and transmit gauzy light. Floor of high-gloss white epoxy.



1 retail
2 consultation
3 cash/wrap
4 spa cabin
5 lounge
6 men's washroom
7 women's dressing area
8 shower
9 lavatory



3

 plan (scale approx 1:220)



House and studio,
Santa Cruz de la Sierra, Bolivia
Architect
Luis and Alvaro Fernández de Córdova Landivar

1



2





3

Bolivian phoenix

A Bolivian house makes use of parts of redundant industrial buildings to generate an ecologically appropriate architecture that respects both topography and climate.

The scheme for a voluminous airy house and studio in Santa Cruz de la Sierra in Bolivia was designed by Luis and Alvaro Fernández de Córdova Landívar. By skilfully combining salvaged industrial parts with new structures and treasuring existing vegetation, they have created a dwelling that responds to the landscape and the hot rainy climate of the region.

Christened El Galpón, (which means The Shed), the scheme consists of two independent structures sheltering beneath the spreading canopy of an old metal shed, made in Belgium and rescued from an industrial site. Siting the assembly was determined by the position of an existing group of ancient and beautiful trees which architects and client were determined not to disturb.

The main axis of the assembly, running north-east/south-west, is traced by the line of a long thin swimming pool running down the middle between house and studios. It was created out of an old concrete water tank, salvaged with the shed. On the north-west side of it is a two-storeyed structure containing the house; on the south-east are a big double-height workshop and a studio linked by a bridge at the upper level.

To allow the to circulate and create an insulating cushion, structures were made separate from the canopy. Axial cuts in the skin of the metal umbrella reveal its skeleton – which casts shadows across white walls – and they open up the pool and central patio to the sky.

The architectural language is one of slender structural elements – columns, trusses, linking bridges, balustrading – of voids partly enclosed by reflective white planes that seem, by turn, solid or insubstantial depending on the size of openings. Planes are perforated by a thin window strip (turning the outside corner of the kitchen), cut away by double-height stretches of glass panels and pierced by a linking bridge or projecting balcony. The main living and dining room is a lofty volume filled with diffused luminance from a

1
Both roof and pool (foreground) are rescued industrial structures.
2
Roof provides shade, while allowing air to circulate round main masses of house.
3
House is in two parts: living and sleeping to left (north), workshop and studio to right.



4



5

4
Sitting area, looking south towards workshop.
5
Studio table is massive slab of mahogany.

transparent wall that rising the full double height turns the corner at the top and becomes part of the roof.

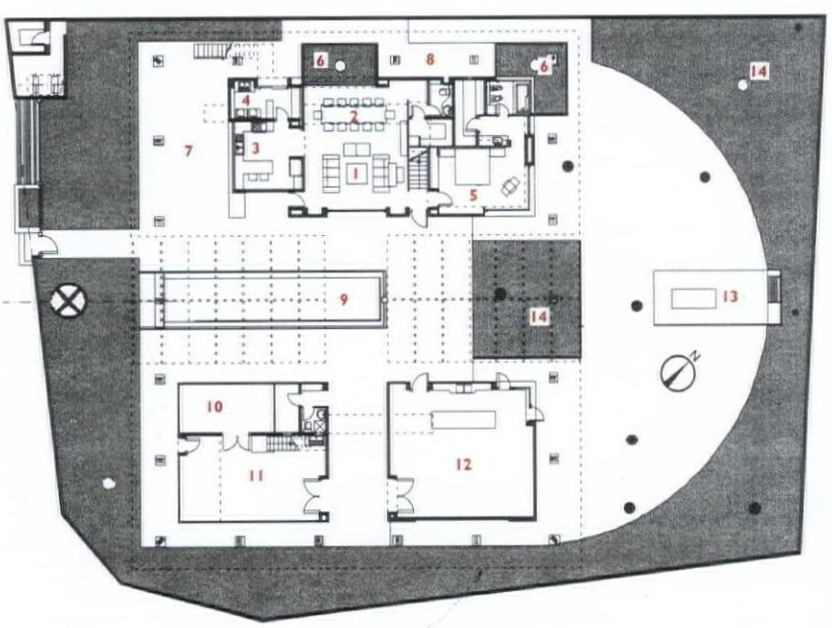
Two massive pieces of mahogany, 4m long and 1m high, have been made into tables in the studio and dining room. Placed under the gallery linking upper bedrooms, the dining table underscores the horizontal dimensions of the space.

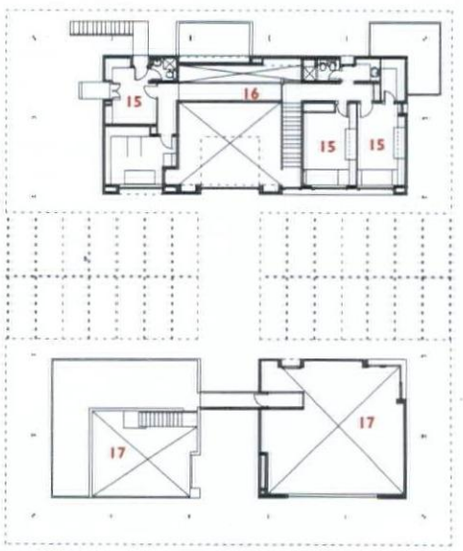
Architect
Luis and Alvaro Fernández de Córdova Landívar, Santa Cruz de la Sierra, Bolivia

HOUSE AND STUDIO, SANTA CRUZ DE LA SIERRA, BOLIVIA

ARCHITECT

LUIS AND ALVARO FERNÁNDEZ DE CÓRDOVA LANDIVAR

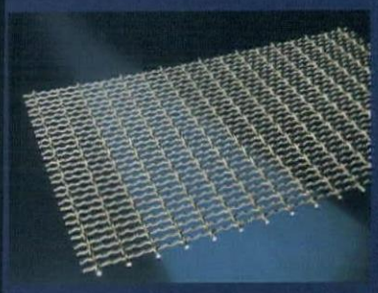


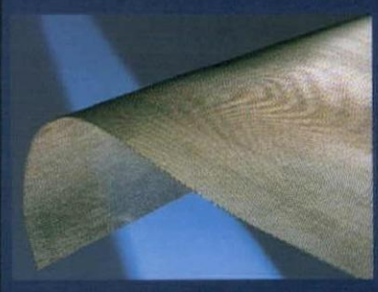


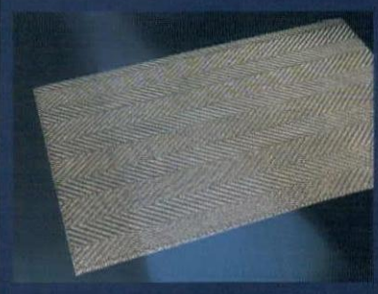
ground floor (scale approx 1:500)

first floor

Woven Wire Cloth and Screens
for Architecture and Design



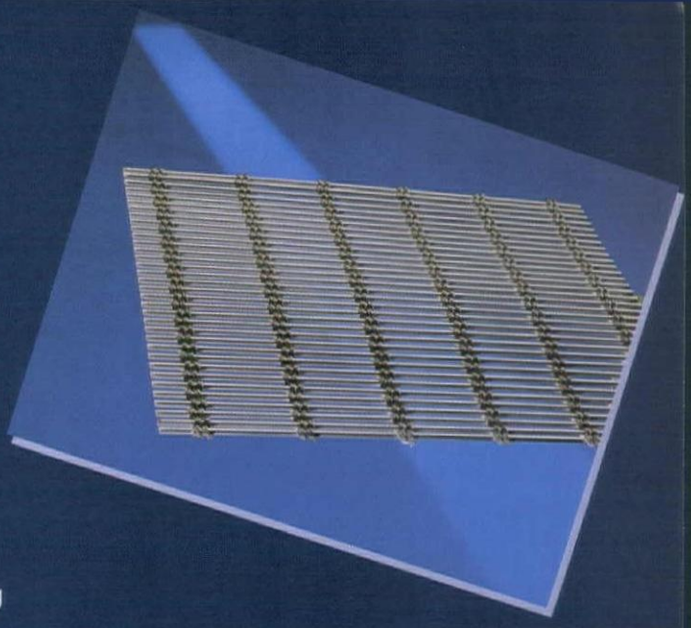




made from stainless steel, aluminium or other materials.

Applications:

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- Security / Protection



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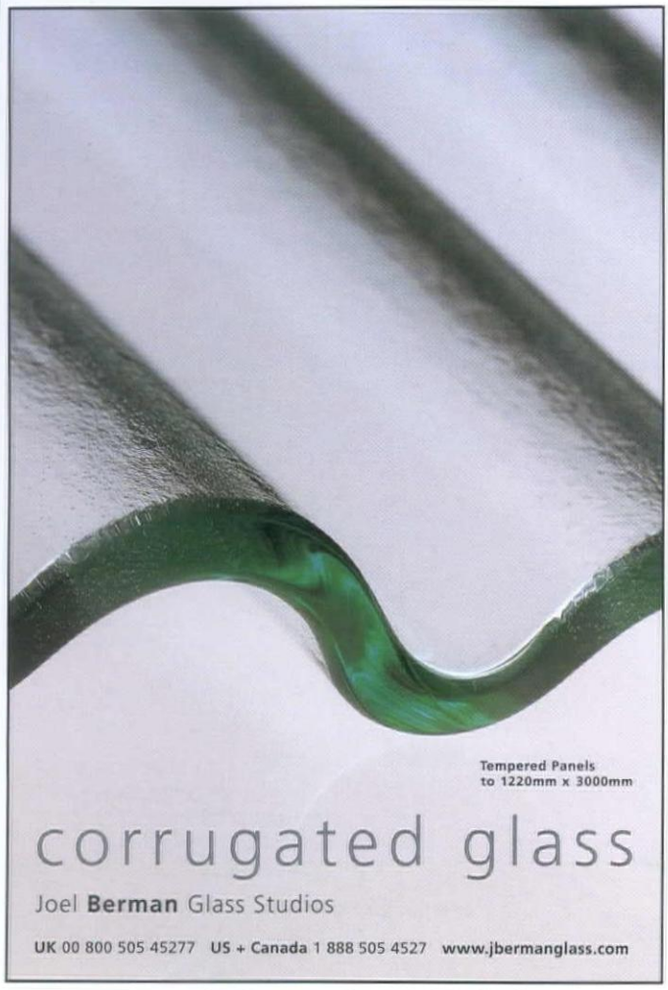
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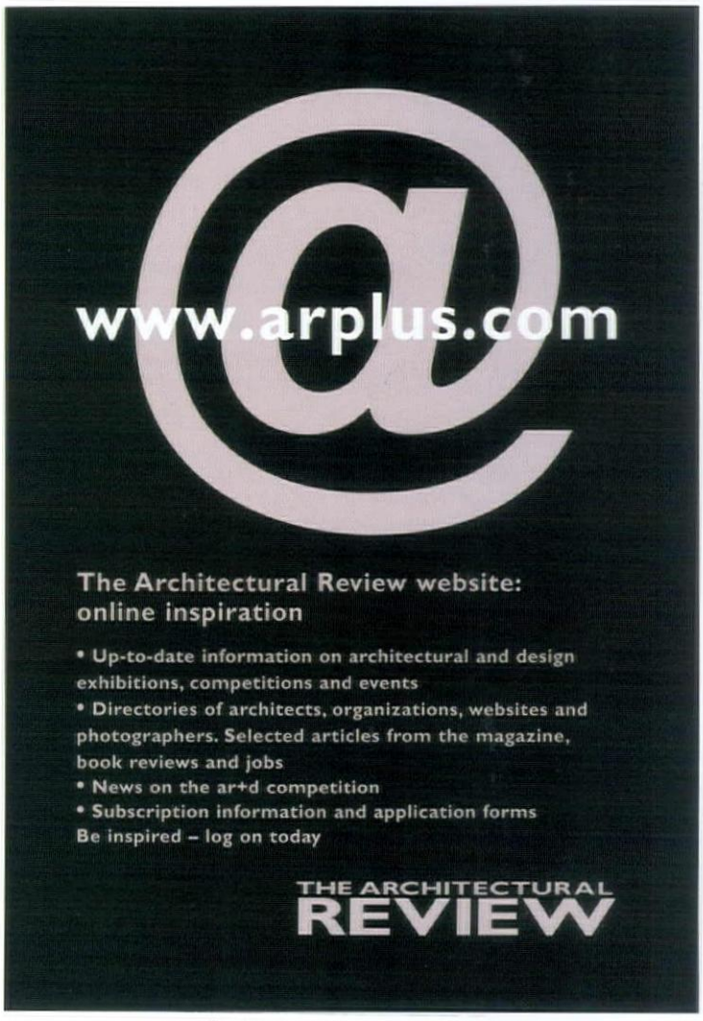
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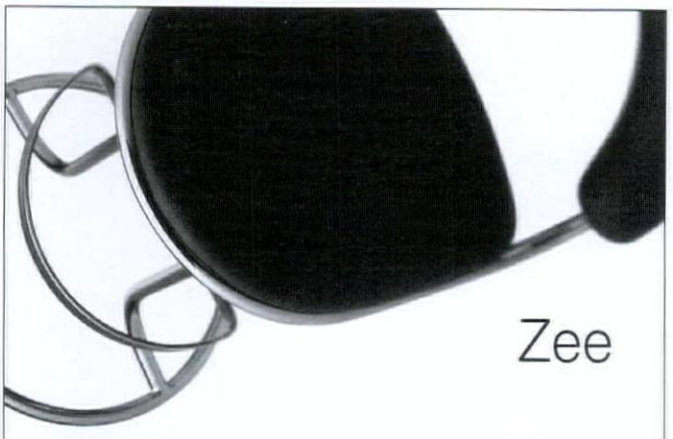
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RESOLUTE



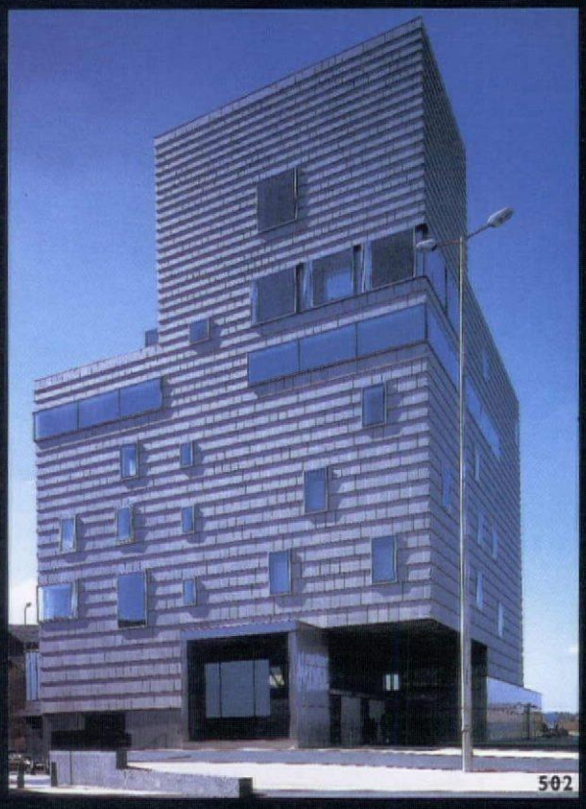
precious pendant
glass light
designed by Douglas Varey

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www.resoluteonline.com

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501



502

501 KME TECU

Designed by architect Gonçalo Sousa Byrne, the new Harbour Control Tower in Lisbon, Portugal, leans slightly out over the River Tejo, clad with red-brown copper sheets of Tecu-Classic. The nine-storey tower monitors and controls shipping traffic and contains seminar rooms and offices. The ground floor is walled with light-coloured stone to anchor the building in its site. The floors above are clad with copper sheets with horizontal double seams. The three top floors are clad with a glass curtain wall set behind a framework of copper slats. The copper cladding has already formed an oxide layer which stabilizes it, protecting it from exposure to the atmosphere.

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502 NBK KERAMIK

The new art gallery in Walsall, West Midlands, UK, was designed by architect Caruso St John. It is clad with a silver grey terracotta rainscreen with strong horizontal joints. The Terrart terracotta tiles were chosen for their qualities of precision manufacture, colour and texture. The elements are available in lengths of between 600mm and 1.55m. Custom-made profiles, for instance curved corner pieces, are also available.

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503

503 SCHÜCO

A new UN building in Hamburg, the seat of the International Tribunal for the Law of the Sea, has recently been completed. Set in spacious parkland on the banks of the Elbchaussee, the building has a glazed twin-walled facade, a system which allows extensive views out while avoiding the need for air-conditioning. The internal skin is based on the Schüco Royal S75 profile and has aluminium-framed opening lights. The external skin is a mullion and transom construction with fixed glazed lights; pivoting glass slats are provided for air circulation. The skins were manufactured as floor to ceiling units; the air space between is divided by glazed partitions into 'box windows', to prevent the spread of sound and fire.

Enquiry 503 www.arplus.com/enq.html


504

504 RITEC

Designed by architect Henning Larsen, the Würth Museum, Schwäbisch Hall, Germany has recently been completed. The facades are glazed with a special 8mm white glass which is protected with the Clearshield system. The system provides the glass with a non-stick easy-clean surface which maintains it in a pristine and clean condition. Maintenance costs are also reduced.

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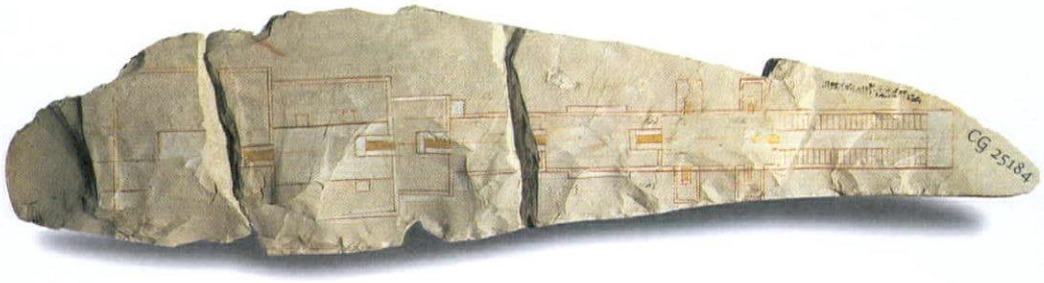
Arab Republic of Egypt
Ministry of Culture

Under the Patronage of UNESCO

Supervised by UIA - Union of International Architects

The Grand Egyptian Museum

International Architecture Competition



P24

Ostracon with a Plan of a Royal Tomb
Painted Limestone, Length 83.5 cm
Valley of the Kings,
Tomb of Ramesses IX (KV 6)
Late Twentieth Dynasty (11th Century BCE)
G. Daressy's Excavations (1888)
One of the estimated 140,000 artifacts currently in the collection of the Egyptian Museum, Cairo.
Image from "Treasures of the Egyptian Museum"
© 2000 Whitestar S.r.l. - Vercelli, Italy
The American Univerity in Cairo Press
Photography by Araldo De Luca

Invitation

This is an open invitation to architects and consultants from around the world to engage in a challenging act of creative design that stipulates a unique architecture and state-of-the-art museum complex for the long anticipated Grand Egyptian Museum. Egypt, the centre of civilisation, art, and culture, offers its unique site neighbouring the Pyramids of Giza as a genius loci for such a cultural and architectural challenge that best addresses the world's Third Millennium and Egypt's Seventh Millennium.

Challenge

First Phase - 7 May to 17 August 2002. Twenty winners will be announced October 2002 and will pass on to the Second Phase. Second Phase - November 2002 to March 2003. Winners will be announced June 2003.

Organisation

Regulated in accordance with the Revised Recommendations of the International Competitions in Architecture and Town Planning, adopted by the General Conference of UNESCO in 1978. Official language of the competition and all related correspondence will be English. Official measurement system will be Metric.

Jury Members

Architects:
Dr. Salah Zaki (Egypt)
Dr. Galal Abada (Egypt)
Mr. Peter Cook (England)
Mr. Teodoro Gonzales (Mexico)
Mrs. Gae Aulenti (Italy)
Mr. Jong-Soung KIMM (Korea - UIA representative)

Egyptologists:
Dr. Gaballah Ali Gaballah (Egypt)
Mr. Sergio Donadoni (Italy)

Museologist:
Mrs. Françoise Cachan (France)

Deputy Jury Members:
Dr. Fayza Haikal (Egypt)
Mr. Arne Eggebrecht (Germany)
Ms. Ana Maria Zahariade (Romania - Deputy UIA representative)

Technical Committee Coordinator:
Dr.Yasser Mansour (Egypt)

Prizes

First Phase: Twenty winners will receive a prize of $10,000US each. Second Phase: First prize: $250,000US
Secondprize: $150,000US
Third prize: $100,000US
A sum of $200,000US will be distributed among Honourable Mentions based on the discretion of the jury.

Contact

The Grand Egyptian Museum
International Architecture Competition
Coordinator: Dr. Yasser Mansour
Al Remayah Square, Pyramids, Giza, Egypt
Tel: (2) 02 386 59 17
(2) 02 386 59 11
Fax: (2) 02 386 58 71
Email: gem1@idsc.net.eg
Web: www.gem.gov.eg

Registration

From 7 January to 7 April 2002. Registration may be made by mail, e-mail, web site online form, fax, or in person at the Giza address. Fees for registration are $300US + $50US for international shipping and handling, to be paid by bank transfer to the below address. Bank charges to be paid by applicants. The registration fees are non-refundable under any circumstance.
Bank Misr - Cairo Branch - 151 Mohammed Farid St., Cairo, Egypt
Account Holder: The Supreme Council of Antiquities
Account number for Egyptian Pounds (LE): 101/37/110200/00/4
Account number for US Dollars($): 101/11/018872/00/0
Bank Telephone Number: (2) 02 391 3682
Bank Fax Number: (2) 02 391 9779

Application

Applications for registration must arrive no later than 18:00h (+2 GMT) on 7 April 2002. Applications are to be accompanied by:
- Complete registration form with name, address, and country of origin of the architect or team of architects applying.
- Documentative evidence of the architect's or team leader's right to exercise the profession in his or her own country.
- Copy of bank receipt confirming fee payment.

Competition Brief and all related documents will be delivered during the month of April 2002 to the exact address of the registered participants. All correspondence and inquiries should be addressed to the Technical Committee Coordinator at the Giza address and/or e-mail address. Deadline for submission of the First Phase documents (two copies) shall be 12:00h (+2 GMT) 17 August 2002 at the Giza address.

Emblem of Eternity

enquiry 15 www.arplus.com/enq.html

505 STOAKES SYSTEMS

Kalwall is a structural composite sandwich panel system which is translucent, redistributing daylight to achieve a calming 'museum quality' diffused light. It has been used to enclose the new sports hall of Burlington Danes School, London, UK, designed by architect Norman and Dawbarn. Kalwall is ideal for indoor sports as it enhances light on cloudy days and eliminates glare and shadows. It is highly insulating and virtually maintenance-free.

Enquiry 505 www.arplus.com/enq.html



505

506 SPACE DECKS

A complete building envelope has been designed, supplied and installed by Space Decks as part of a major refurbishment of the Royal Sun Alliance building in Liverpool. The '60s office building has been completely transformed with a new main entrance elevation of frameless glazing and a new roof, a tubular steel space-frame inset with flat and sloping rooflights. The frameless glazed units to the elevation are bolted directly to the structural steelwork; they are shaded by a pair of horizontal *brise-soleil* which also act as maintenance walkways.

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506

507 VETROARREDO

Nordstadt Metropolitan railway station in Hanover, designed by architect Hansjörg Göritz, has walls of cobalt blue glass blocks. By day they give the building a 'cool crystal' appearance; at night they are translucent, taking the form of a 'glowing lantern' to transmit light from within.

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507

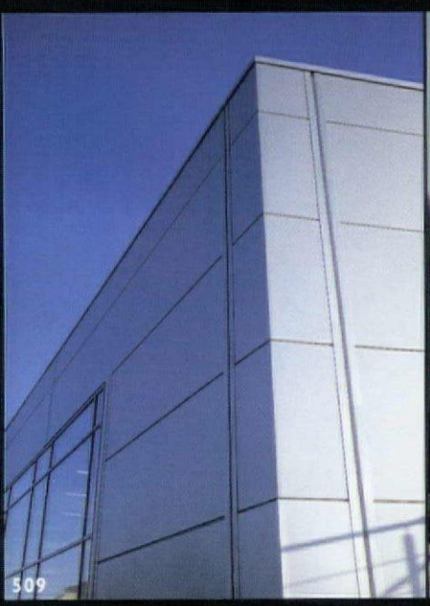
508 GLAVERBEL

Glaverbel, Europe's second largest manufacturer of glass, has recently introduced several new products. Stopsol Silverlight is a new, moderately reflective glass available in green and blue tints. Two neutral-coloured reflective glasses, Safir and Carat, have been added to the Stopray range. Planibel Azur and Privablue are two new shades in the Planibel range of float glasses. They are ideal for use in double-glazed assemblies and help to reduce solar glare.

Enquiry 508 www.arplus.com/enq.html



508



509



510

509 PAROC PANEL SYSTEM

The Paroc fireproof panel system comprises lightweight composite panels with a core of non-combustible stone wool bonded to colour-coated steel sheets. They offer unique performance characteristics when employed as cladding, partitions and ceilings. The system features a range of surface profiles from micro-profiled to smooth. Corner panels are also manufactured. A new panel, known as Shadowline, has been recently introduced. The panels can span up to 7m without secondary steelwork; they are detailed to achieve a high standard of durability and fire safety.

Enquiry 509 www.arplus.com/enq.html

510 SEELE

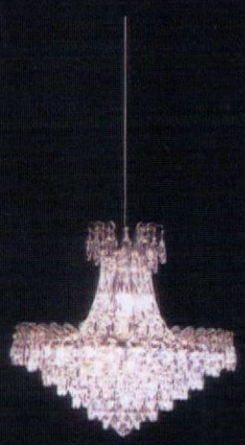
Seele has designed a series of large point-supported glass units and a suspended steel support structure to create a very lightweight construction to the street entrances and glazed atrium roof at the new headquarters of Pfizer, Walton Oaks, London UK.

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Specifier's information



North 4 Design

Vision panel specialist North 4 Design has added a 30-minute fire integrity to its expanding range of vision panels for doors and walls. Finished in brushed stainless steel with a choice of glass and fixings, they provide an attractive solution to functional vision requirements. All vision panels are designed for simple installation and are supplied as complete kits. A custom etching/signage service is also available.

900 www.arplus.com/enq.html



Louis Poulsen

A pendant fluorescent light fixture, known as A, has been developed to meet international standards for office lighting. A is the first in a new series and was designed by architect KHR A/S with Louis Poulsen Lighting. The shape of the A fixture is accentuated by an aperture which allows light to be emitted on the sides; it can be shielded with a double parabolic reflector to meet international standards for controlled light in certain directions. The A fixture is manufactured in anodized aluminium and can be fitted with one or two fluorescent light sources.

901 www.arplus.com/enq.html



RMC Concrete Products

Priory block paving by RMC Concrete Products has been used as part of the regeneration of St George's, a historic town in Bermuda. The town has World Heritage status, due to its unique urban structure of public squares, narrow streets and alleyways. The blocks have been laid in a variety of colours, materials and layout patterns in order to define pedestrian and vehicular areas without the need for signage and road markings. They are designed to resemble historic stone setts with naturally textured surfaces and edges.

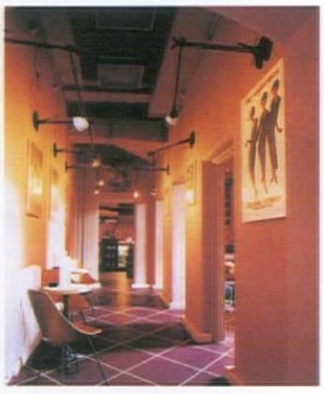
902 www.arplus.com/enq.html



Tridonic

Tridonic DSI (digital serial interface) digital ballasts, which dim artificial light in response to levels of daylight, have played a part in ensuring low energy consumption and low maintenance at the new Arup Campus building at Blythe Valley Park, West Midlands, UK. Artificial lighting in the building is provided by direct/indirect luminaires with curved profiles, joined in groups of four. They have Tridonic DSI digital ballasts linked to photocells through a lighting control system. This maintains an illuminance of 450 lux on the working plane; the lighting is dimmed in response to daylight to achieve this.

903 www.arplus.com/enq.html



Artemide

Luminaires from Artemide have recently been specified for the Alias Hotel in Exeter – recent winner of the Good Hotel Guide's 2002 Designer Hotel of the Year Award. A range of luminaires, from classically elegant to contemporary, has been used. In the bedrooms, Tolomeo wall mounted counter-balanced luminaires have been positioned at each side of the beds. In the hotel's club, Crickets luminaires are used to illuminate vintage 'film noir' posters.

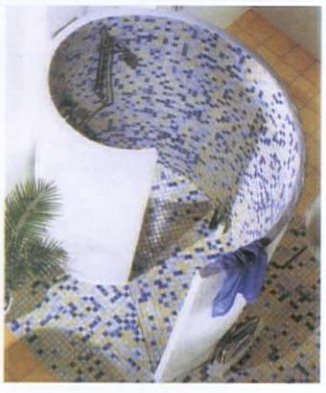
904 www.arplus.com/enq.html



Siteco

Siteco designed and supplied the lighting system for the offices of Werndl, the office furniture manufacturer, in Rosenheim, Germany. The company's requirements for a flexible lighting system which would avoid direct and reflected glare on VDU workstations has been met by the use of Quadrature luminaires. Each luminaire module consists of four flat 300 x 300mm microprism panels mounted in an aluminium frame below T5 fluorescent lamps. The surface brightness of the panels is restricted to 1000cd/m2 at all angles above 65 degrees to the vertical.

905 www.arplus.com/enq.html



Wedi Systems UK

A brochure with information and technical data on the Fundo shower room system has just been published. Fundo shower rooms were available in dimensions of 900 x 900mm, 1200 x 1200mm and 1500 x 1500mm on plan; the range has now been expanded to include new shower room shapes including round, oblong, pentagonal and spiral-shaped plan forms. The range is based on Wedi's waterproof tilebacker board which provides an ideal surface to tile to. The designs and shower partition sets are supplied with all the accessories required for reinforcing and fitting the products.

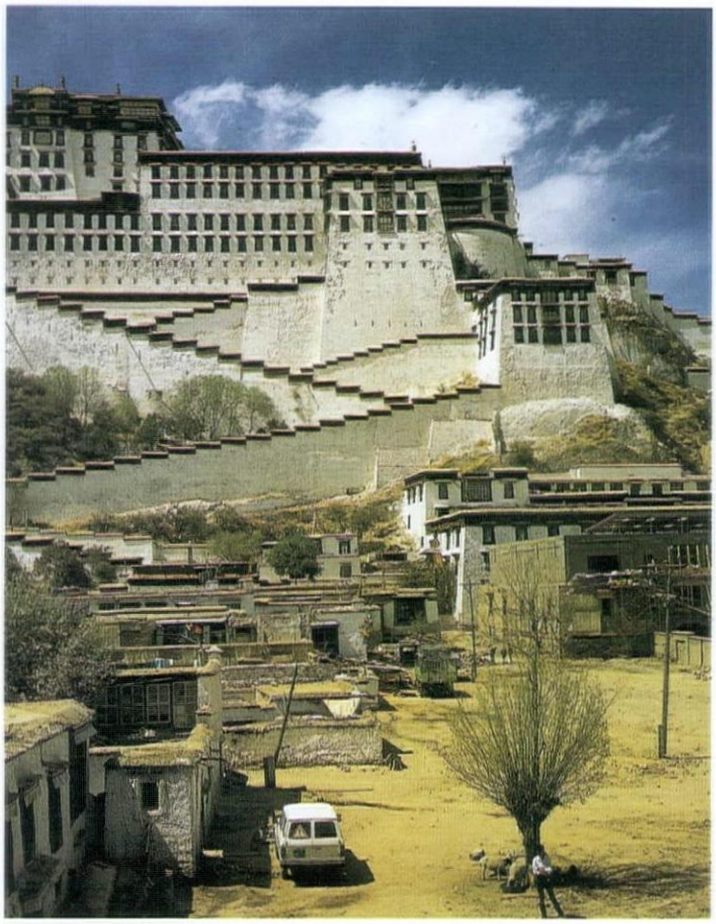
906 www.arplus.com/enq.html



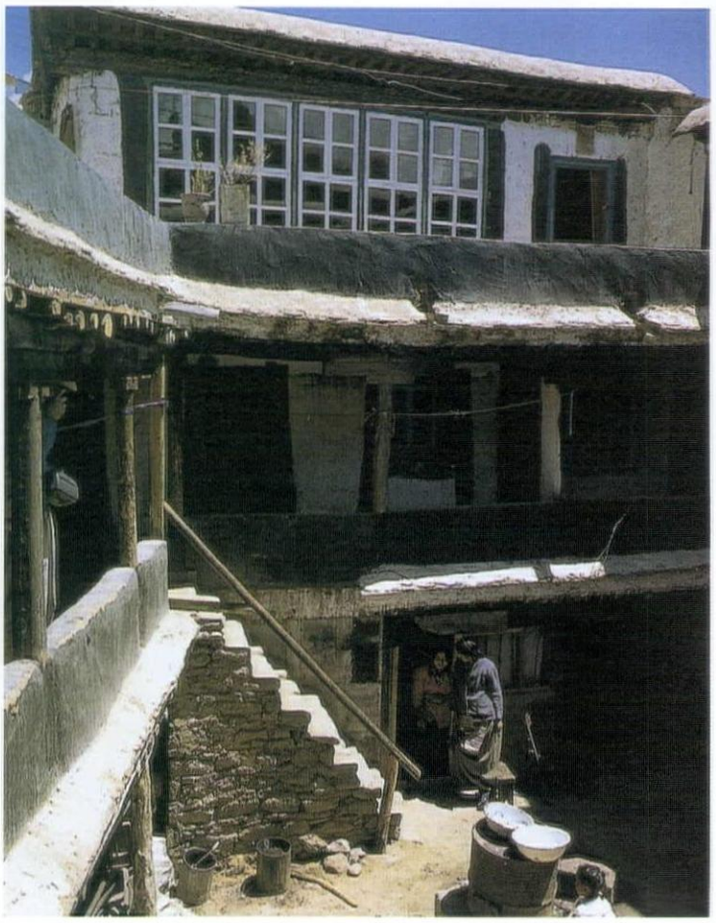
Haironville TAC

A new cinema in Cardiff, South Wales, is clad with Promplan flat panels manufactured by Haironville TAC. The 15-screen cinema is one of the largest in the United Kingdom. The auditoria are enclosed in acoustic blockwork and the facades are clad with flat and curved Promplan panels with champagne and bronze colour-coated Duranar finish, chosen for its colour durability and good corrosion protection. The panels were secret-fixed to a supporting steel framework secured to the main steel structure.

907 www.arplus.com/enq.html



The Potala Palace, hovering over the small settlement of Shöl.



Trapchishar: a court in a nineteenth-century town house.

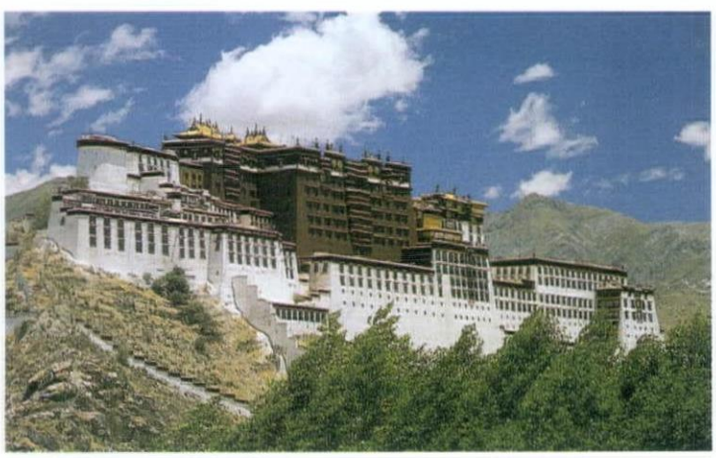
FORGOTTEN CITY CELEBRATED

THE LHASA ATLAS

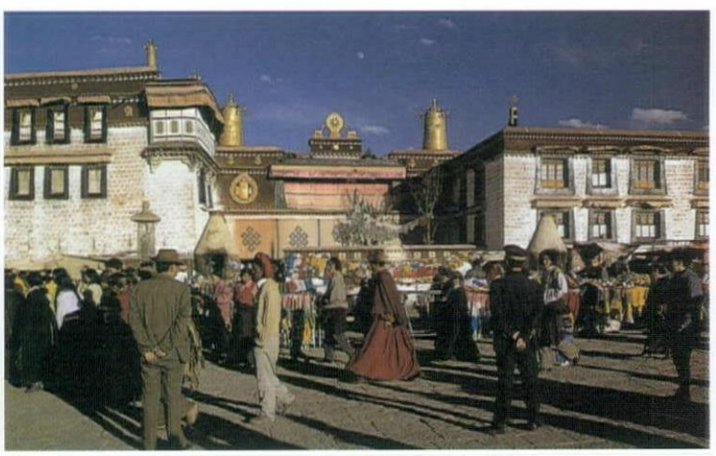
By Knud Larsen and Amund Sinding-Larsen.
London: Serindia Publications. 2001. £40.

Lhasa is the most mysterious and mythic city in the world. High up on the plateau, it was until a few decades ago approachable only by pack animals. It was cut off from the south by the Himalayas, the world's highest mountains, and from China by grey deserts. The awesome Potala Palace towered isolated over the plain, echoed by the Jokhang Temple, dominating the small town. Then, it had about 30 000 inhabitants. Today there are 10 times that number. The city has vastly altered. Now there are international hotels and discos. New buildings are made of concrete, not brick and stone. The plain of meadows and gardens between the Potala and the Jokhang is covered with rigid ranks of precast dullness.

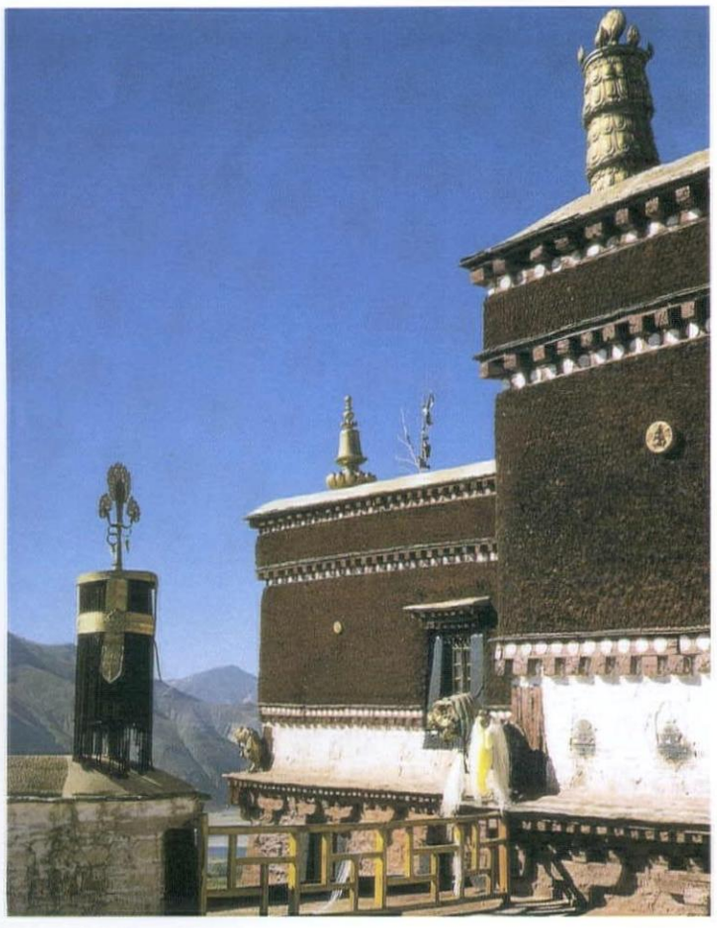
The Chinese have rightly been accused of debasing Tibetan culture. Much of the old city round the Jokhang has been destroyed to make way for new functions, and an infamous motor road has been driven through its organic tissue. But the Chinese, coarse as their changes have been, are perhaps no worse than many of their '60s predecessors in the ancient towns of Europe and Asia, who casually wiped out history in the cause of ill-defined progress. In Lhasa, the destruction seems much more tragic because, in



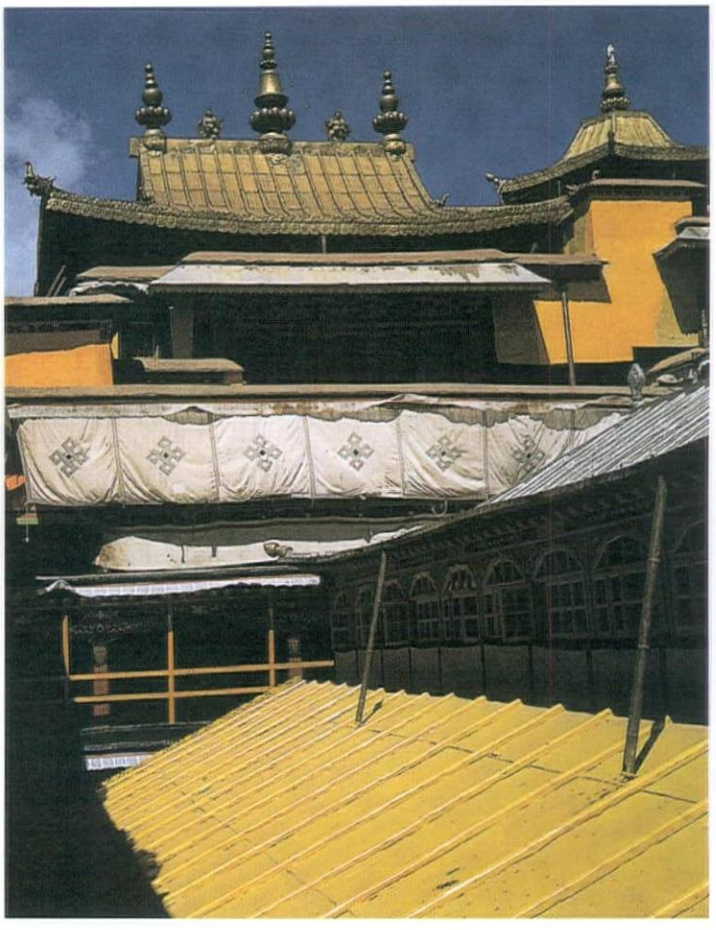
Potala: the White Palace and the Red.



Jokhang Temple, main entrance today.



Potala's benma panels (unique to Tibetan architecture, made of tamarisk and clay).



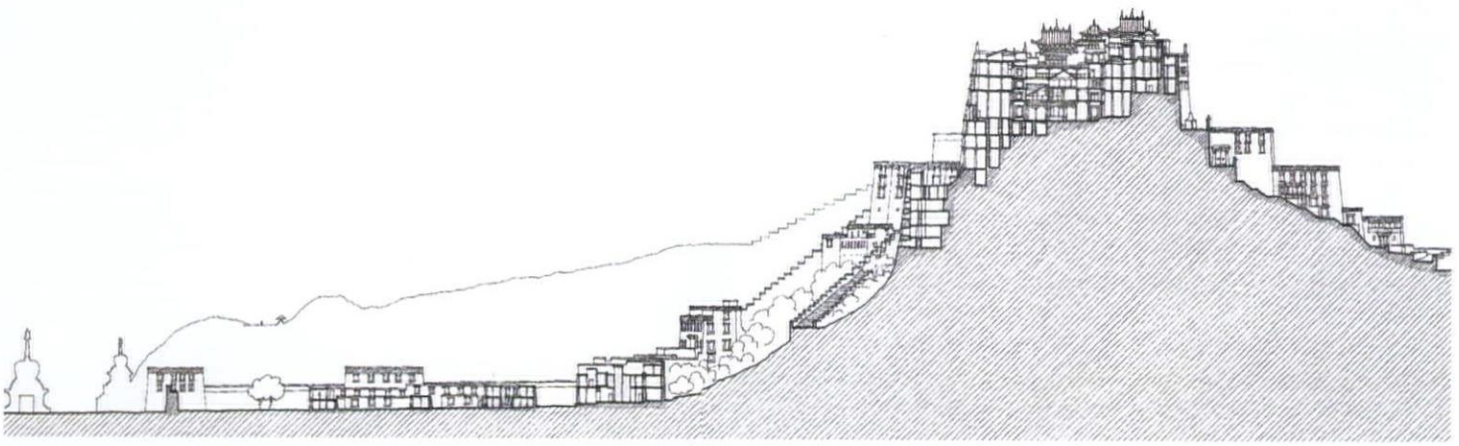
Potala from White Palace roof – entire vocabulary of Tibetan architecture displayed.

the West, we have now (on the whole, and with very many scandalous exceptions), learned to respect what we have inherited.

Now, there is some hope that what remains of the old city of Lhasa may have hope of continuity. Two Scandinavians, Dane Knud Larsen, and Norwegian Armund Sindig-Larsen have made a magnificent book – *The Lhasa Atlas: Traditional Architecture and Townscape*. It is well written in a language foreign to the authors about a place almost utterly divorced from the rest of civilization. They record the state of the city now, decry the vile destructions and offer hope. They use the most up-to-date satellite technology to describe the townscape, and old fashioned cameras, tapes and measures to record individual buildings. The book is a synopsis of immense labour: they have chronicled and recorded a place that at first seemed to be crashing in front of them.

Their efforts (though they are too modest to say so) are clearly having some effect. Destruction has been dreadful, but a tattered fabric remains. The Potala has been made a World Heritage site. The book teaches us what must be preserved and why. The Chinese Government is concerned to allow indigenous cultures to flower. They should send copies of the book to all their commissioners in Tibet.

You should buy it because you could perhaps help to save Lhasa, and because the book is a beautifully and carefully crafted account of a fragile civilization hovering at the very edge of cultural catastrophe. PETER DAVEY



Section through Potala Palace, with perimeter wall of Shöl left, then horse stables and palace on hill.

ELUSIVE KAHN

LOUIS KAHN

By Joseph Rykwert. Photographs by Roberto Schezen. London: Harry N Abrams. 2001. £52

When Kahn died there was only one slim but excellent volume by Vincent Scully published in 1962. In his concluding sentence, the ever prescient Scully wrote 'how slow the growth of this tree, like an olive, bearing for the generations to come'. It has been the same with Kahn scholarship. In 1975, after Kahn's death, his colleague and key member of the Philadelphia School, Romaldo Giurgola edited a complete volume of his work. For several generations of architecture students, these texts were almost all they had with which to explore one of the key figures of twentieth–century architecture. These days we are swamped with monographs and vanity publishing. Kahn was the very antithesis. It was word of mouth, anecdote, a guest appearance at the Team 10 Conference at Otterlo, a few enigmatic statements in *Perspecta*, you met someone who had been to his masterclass at Penn, or you heard Kahn lecture.

Disappointing then, that Joseph Rykwert, the author of 'Adam's House in Paradise', a polymath and architectural scholar of distinction, gives us no new insights into Kahn in this photo essay to celebrate the centenary of his birth. This is all the more baffling as Rykwert has been Paul Cret professor at Penn in Philadelphia, with access to Kahn's archive and his remaining circle. Kahn scholars and students would have been better served by republishing Scully's text rather than this pot-boiler.

David Brownlee and David de Long's 1992 *In the Realm of Architecture* builds the most comprehensive picture of Kahn's life and work, with its critical essays, biographical descriptions, and the most sublime photographs by Grant Mudford.

STEPHEN GREENBERG

SCIENCE OR WHAT?

ARCHITECTURE AND SCIENCE

Edited by Giuseppa Di Cristina

URBAN ENVIRONMENTS

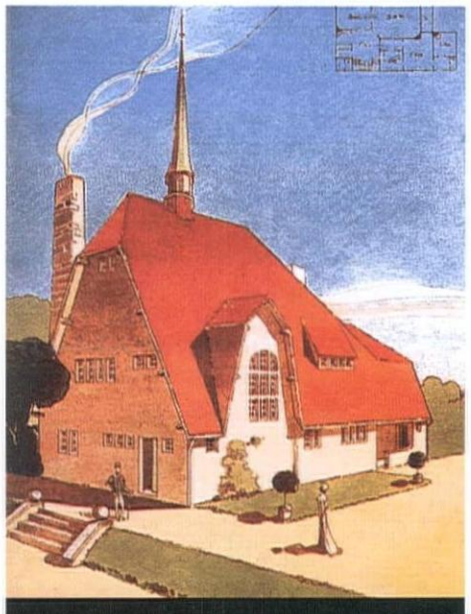
Edited by Elisabetta G. Mapelli

INTERDISCIPLINARY ARCHITECTURE

Edited by Nicoletta Trasi. London: Wiley-Academy. 2001. £27.50 each

These three volumes present anthologies of essays previously published in *Architectural Design*. The implicit intention of the enterprise is to discover, in the content of that distinguished journal, broad, pervasive and central themes in the current architectural discourse. The relation of Architecture and Science, the issue of Urban Environments and the proposition of an Interdisciplinary Architecture all appear to be valid categories in the extensive terrain of present theory and practice and the essays gathered together are almost all notable in some way or another. But, as scrutiny of the volumes quickly reveals, the process of anthologization and categorization is neither simple nor self-evidently logical.

First it is necessary to qualify the title of each volume. The content of *Architectural Science*, that includes pieces by Jeffrey Kipnis, Greg Lynn, Gilles Deleuze, Peter Eisenman, Frank O. Gehry, Daniel Libeskind, Neil Spiller, Marcos Novak and Brian Massumi, is more precisely described by Giuseppa Di Cristina's editorial essay, 'The Topological Tendency in Architecture'. This is a skilful resumé of the engagement of architecture with topology that manages to bring order to a complex, confusing and, perhaps sometimes, confused field. I am particularly grateful to her for emphasizing Marcos Novak's reminder that, 'topology does not mean curved surfaces, as is currently held, but is precisely the study of the geometrical properties that remain unchanged when figures undergo continuous transformations'.



Antoine Pompe (with Adhémar Lener), the Little Nest, Le Cottage, 1904, from *Art Nouveau and the Social Vision of Modern Living, Belgian Artists in a European Context* by Amy F. Ogata (Cambridge University Press, 2001, £50). This is the only English analysis of the Belgian Movement which, heavily influenced by the English Arts and Crafts Movement in both form and ideology, blazed through the European cultural firmament at the turn of the nineteenth century, with such brilliant architects as Van de Velde and Horta, and a host of lesser known names. Cambridge has a poor reputation as a publisher of architectural books, and though this one is slighly better than their dreary norm, it is wildly overpriced and not very well illustrated.

Again the scope of the essays in *Urban Environments* is not precisely represented by the title. The focus is the house not the city as the title implies. This is justified by arguing that, 'the house is a constant in the evolution of the built environment', and that, 'dwellings constitute the greater part of the environment we live in'.These are unexceptionable propositions, but there is more to the urban environment than that. The contributions to this volume are ideologically and methodologically more diverse than those in its companions and, in an attempt to establish some order and structure, they are organized in four categories. These are 'traditionalists', 'perpetrators of various isms', 'exponents of a new avant-garde' and 'environment-conscious designers'.

The editorial essay, by Elisabetta G. Mapelli, is, again, skilful, but the need to negotiate a line from the Prince of Wales, through Alberto Campo Baeza, Sarah Wigglesworth and Jeremy Till, Archigram, Foreign Office Architects, Neil Spiller, Future Systems to William Mitchell does tend to limit the possibilities for substantial argument.

Interdisciplinary Architecture is actually about the relation of art and architecture. Nicoletta Trasi's editorial essay is subtitled, Art/Architecture/Landscape: Intersections. This elegantly locates the principal contributions to the book, including essays by Robert Maxwell, Neil Spiller – who scores a unique hat-trick of appearances in all three volumes, Will Alsop, James Turrell, Richard Wentworth, Henri Ciriani, Antoine Predock, Richard Sennett and Jean-Francois Lyotard, in a narrative stretching from Viollet-le-Duc to land art.

There has probably never been a time when the concerns of architecture have generated so many words. These volumes add more to the stockpile, but, with the helpful guidance of their editors, they merit a place on our bulging shelves. All three books are extensively illustrated and elegantly produced. DEAN HAWKES

PUBLIC POSSESSION

YOU HAVE TO PAY FOR THE PUBLIC LIFE: SELECTED ESSAYS OF CHARLES W. MOORE

Edited by Kevin Keim. London: MIT Press. 2001. £30.95

In his most valuable book on *How Buildings Learn*, Stewart Brand distinguished between High Road buildings, which are durable and independent, and accumulate experience, and 'become in time wiser and more respected than their inhabitants'; and Low Road buildings, which are utilitarian, adaptable and endlessly responsive to their users.

This distinction provides the title of this book, from a key essay exploring the architecture of the

US West Coast. The author suspected that he had been asked to explore California in order to discover, first that there was no urban scene and second that there was no monumental architecture. Naturally, as an explorer with open eyes, he found unique forms of both. Charles W. Moore (1925-1993), who had both learned and taught in architecture schools all across the US, is handsomely celebrated in this well-illustrated collection of his essays that will certainly appeal to those who met him. When he writes about 'Plaster in Architecture' we are reminded of the rarity of such a discussion, and when he is given a topic like 'Towards Making Places', he stresses that the important thing about structures and the spaces they enclose is the way in which they figure in the lives of the people who use them, and in doing so establish possession of them. COLIN WARD

MOVING PEOPLE

FUTURE TRANSPORT IN CITIES:

By Brian Richards. London: Spon Press. 2001. £24.99

Is your journey really necessary? To a Londoner, the old wartime adage has never seemed more appropriate. As I inch towards senior citizenhood – with the bus pass almost within my trembling grasp – I feel less and less inclined to go anywhere.

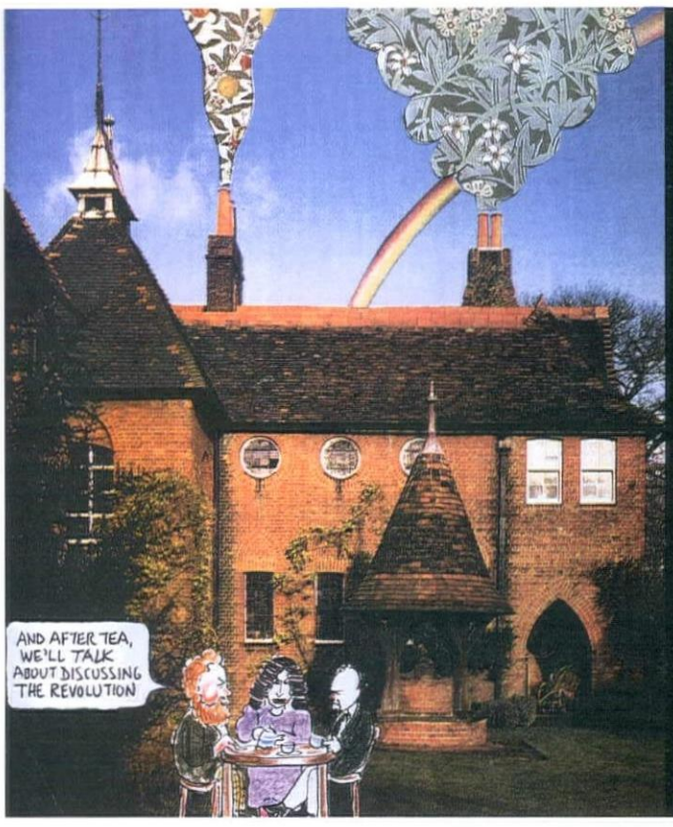
Consider the alternatives. The tube? Words fail me. The taxi? A collector's item, especially after dark. The bicyle/moped/scooter? Only for the intrepid or the suicidal. The car? All the parking spaces are taken. The bus? An agreeable form of transport, certainly, provided you can secure a seat (downstairs, left of the driver) on one of the dwindling supply of Routemasters, and provided you are prepared to endure what Colin Buchanan memorably called the 'patient wretchedness of the bus queue'.

Shank's pony, then? Foot slogging is still the most reliable, safest and – over short distances – the quickest form of transport available. But what about the elderly, the infirm, the heavy laden, and those (a majority) who have to travel over five miles each day to and from work? We did it cheerfully after the October hurricane in 1987. But would we, like Wemmick in *Great Expectations*, be prepared to do it every day?

Brian Richards' absorbing survey examines the alternatives to people-moving now being tried across the world. This is not a polemic: we have enough of those already. It is something more valuable – an anthology of case histories. Most experiments, predictably, are taking place outside the UK. Medium-sized cities like Bilbao, Ottawa or Strasbourg fare better than London.

The French, in particular, seem to be about ten years ahead of us here – as they are in other essential aspects of contemporary life, like football or public medicine. How our poor, ineffectual Mayor must envy his opposite number in Paris! He should read this stimulating, judicious and surprisingly optimistic book.

ALASTAIR BEST



Architecture A-Z **(Wiley-Academy, 2001, £19.99) is Louis Hellman's brilliant trot through almost every aspect of the discipline: historical, theoretical, aesthetic, political and technological. Here is William Morris confronting the Arts and Crafts socialist dilemma at Philip Webb's Red House with a typical perceptive caption. Hellman's collages and cartoons have illuminated much of our perception of architecture during the last three decades. The drawings are always to the point, always witty, always sensitive to the social implications of buildings as well as their appearance, and always humane, even in their author's savagest and most critical moments.**

CONTROLLING VARIABLES

THE ARCHITECTURAL EXPRESSION OF ENVIRONMENTAL CONTROL SYSTEMS

By George Baird. London: Spon. 2001. £49.95

This is a very thorough book with a very clear analysis of environmental systems fully referenced. It is a good source of writing about the subject. In addition, a set of examples is analysed taken across the world without the nationalist bias which creeps into most writing on architecture. Considering that the book is written by a person who originally trained as an engineer, there are very few numbers. It is very difficult to reconcile measured energy consumptions with design predictions. I worked on an electrically heated block of flats in the '60s. Three years' worth of bills for 1000 flats could not differentiate between flats with gable walls and exposed roofs from flats completely enclosed by other flats. The calculated heat loads were different by a factor of two but the bills differed by a factor of six and the variables masked anything caused by the construction. I believe the lesson to be drawn from this observation is that the variables (for example ventilation) must be brought under control.

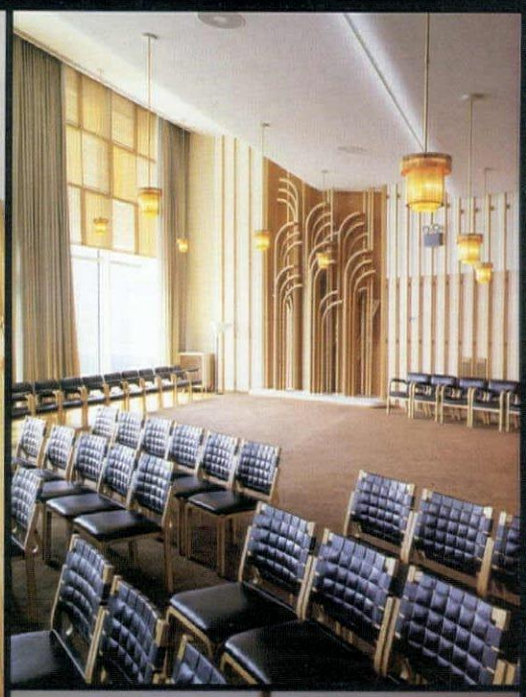
It is important to have observations of energy consumption so that reality can be reconciled with design, and the design of new buildings can be improved. This is one of the important aspects of the PROBE studies which are often referred to. Nearly all the subject matter of the book covers buildings where people work. The key issue of providing natural light is not really covered. Where people work, electric light is usually designed to provide around 500 lux. Housing is different and not so difficult. Rooms are small and shallow and 50 to 100 lux can easily be provided by small openings. If 500 lux is to be provided by an overcast sky (5000 lux) there is a real design challenge which is most easily solved using roof lights. Then a blue sky (10 000 lux) still needs large openings. Full sun (100 000 lux) imposes a real penalty of heat gain. Openings designed to provide enough light under an overcast sky impose a heat loss penalty on a winter's night. These issues are understood by paying attention to the measurements and predictions of energy use and that is why I am disappointed not to get a more quantitative approach written by a renegade engineer. The issue of natural lighting relates to much of the evolved architecture which is often referred to by George Baird.

MAX FORDHAM

Book reviews from this and recent issues of The Architectural Review can now be seen on our website at www.arplus.com and the books can be ordered online, many at special discount.

delight







Photographs: Joanne Chan

A PRECIOUS INTERIOR BY ALVAR AALTO – ONE OF ONLY THREE SURVIVING WORKS BY THE MASTER IN THE UNITED STATES – HAS BEEN SAVED FROM THE THREAT OF DESTRUCTION BY THE EFFORTS OF LOCAL PRESERVATIONISTS.

The Kaufmann Conference Center, a masterpiece by Alvar Aalto located on the top floor of an office tower across from the United Nations headquarters, was saved from destruction last year, thanks to the efforts of local preservationists. This vital piece of New York's architectural heritage was commissioned by Edgar Kaufmann Jr in 1964 and donated to the non-profit Institute for International Education (IIE) when it first occupied the tower.

One of only three surviving Aalto works in the United States, the Center offers an extraordinary setting for lectures, seminars, and award ceremonies. The soaring 4500 square-foot space is bathed in natural light filtered through a geometrical wooden grid on tall windows that open onto a terrace overlooking the East River. Aalto's trademark ribs of cobalt blue tiles impart a lively rhythm to the angled wall that faces the bank of elevators. Sliding walls divide this lobby from the main reception hall and two small conference rooms, allowing them to be used separately or together. The white stucco ceiling undulates up to a peak of 22ft; the walls fan out, and their pale ash panelling is overlaid by ribs of clustered birch rods.

Aalto wanted to simulate an entire forest within this room but was limited by city fire regulations to a single arboreal group of bent birch laminas that evoke a grove of trees. The components were fabricated in Finland, and assembled on site by the building's architects, Harrison Abramovitz & Harris. Aalto and his wife Elissa designed every detail, including a buffet table that echoes the profile of the reception room, suspended light fittings, torchères that cast a soft glow, and moulded door handles.

Though the IIE still occupies two floors, it sold the building in 1998 to a Japanese charity that threatened to dismantle Aalto's interior and donate the fragments to a museum in order to redevelop the space for commercial lease. That disaster was averted, and the Japanese sold the building back to the IIE. The NY Landmarks Commission is presently considering an application from the regional branch of DoCoMoMo to give the interior landmark protection and permit public visits. MICHAEL WEBB