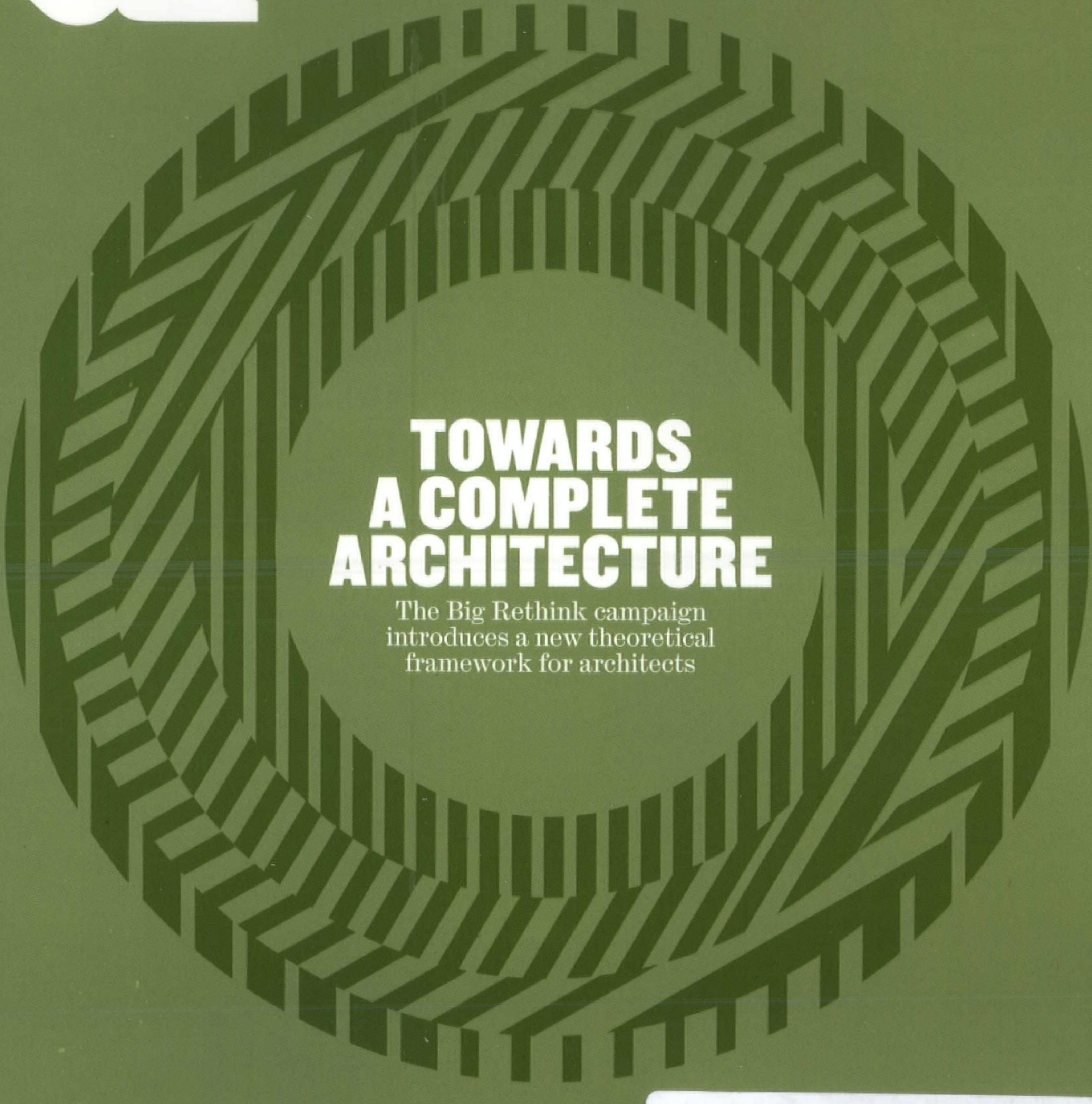

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The Big Rethink campaign introduces a new theoretical framework for architects

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**Cover: Peter Buchanan's The Big Rethink. Follow the AR's third instalment of the campaign on page 67**

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**Villem Tomiste** is an Estonian-born architect based in Tallinn. He won the Estonian Young Architect of the Year 2012, and is Vice-Chairman of the Union of Estonian Architects. In 2011 he organised the first Tallinn Architecture Biennale. This month he writes our *View From* column on his home city

**Michael Webb** is a long-standing contributor to the AR. He is an architectural writer and critic based in Los Angeles. In this issue he reports on the evocative Water Cathedral by GUN Arquitectos and Color Shadows by Eduardo Castillo, two dynamic pavilions that form part of an international young architects programme

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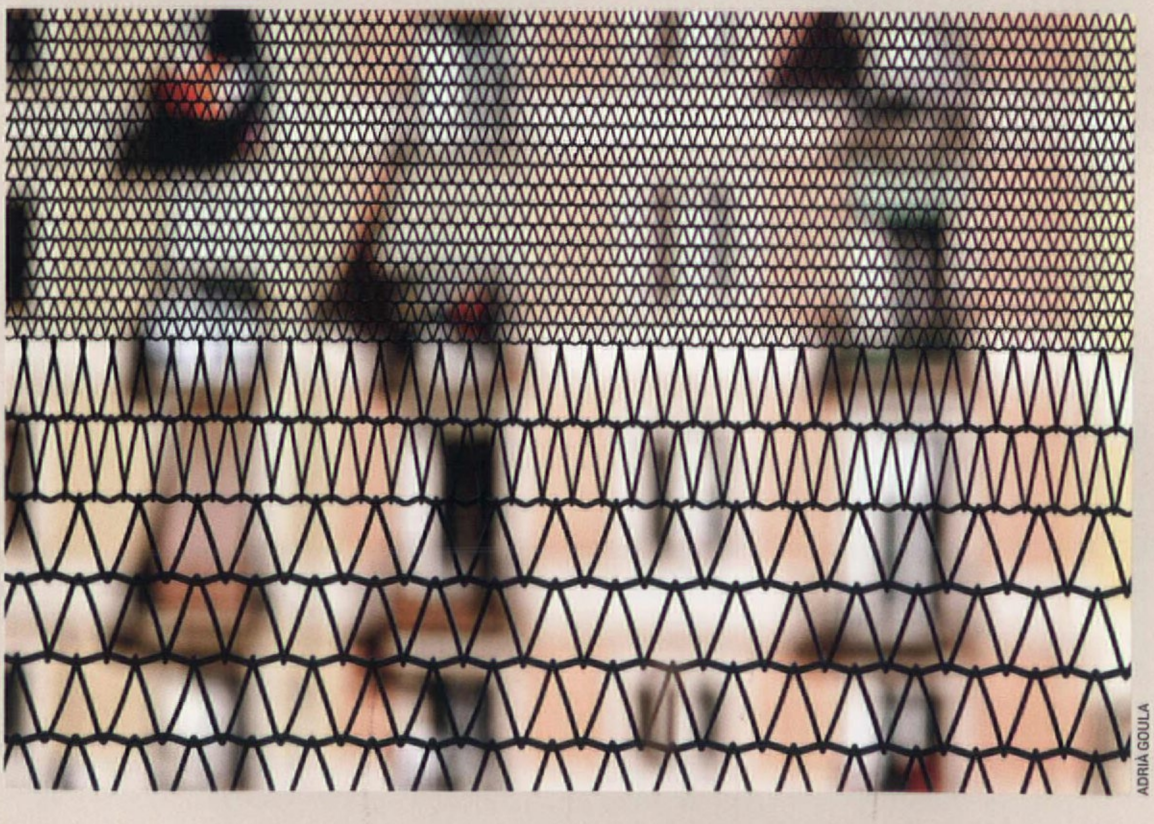

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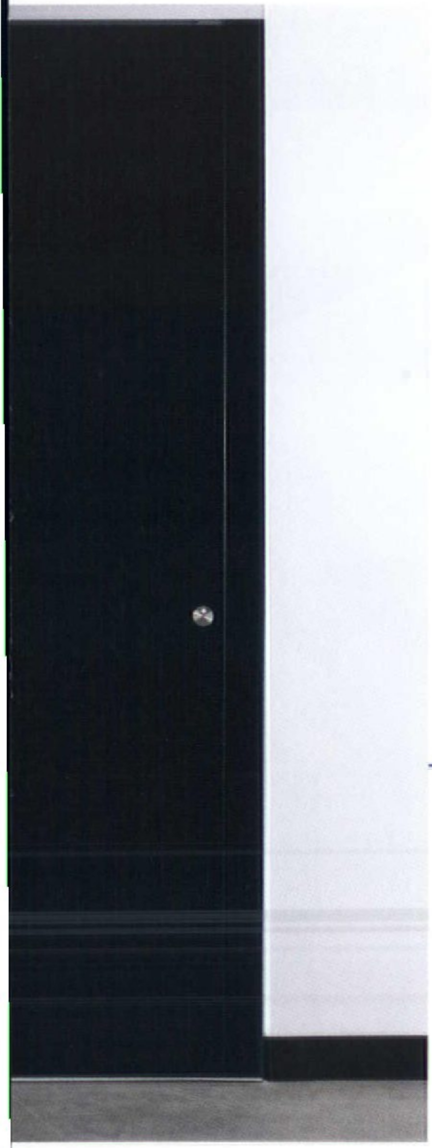

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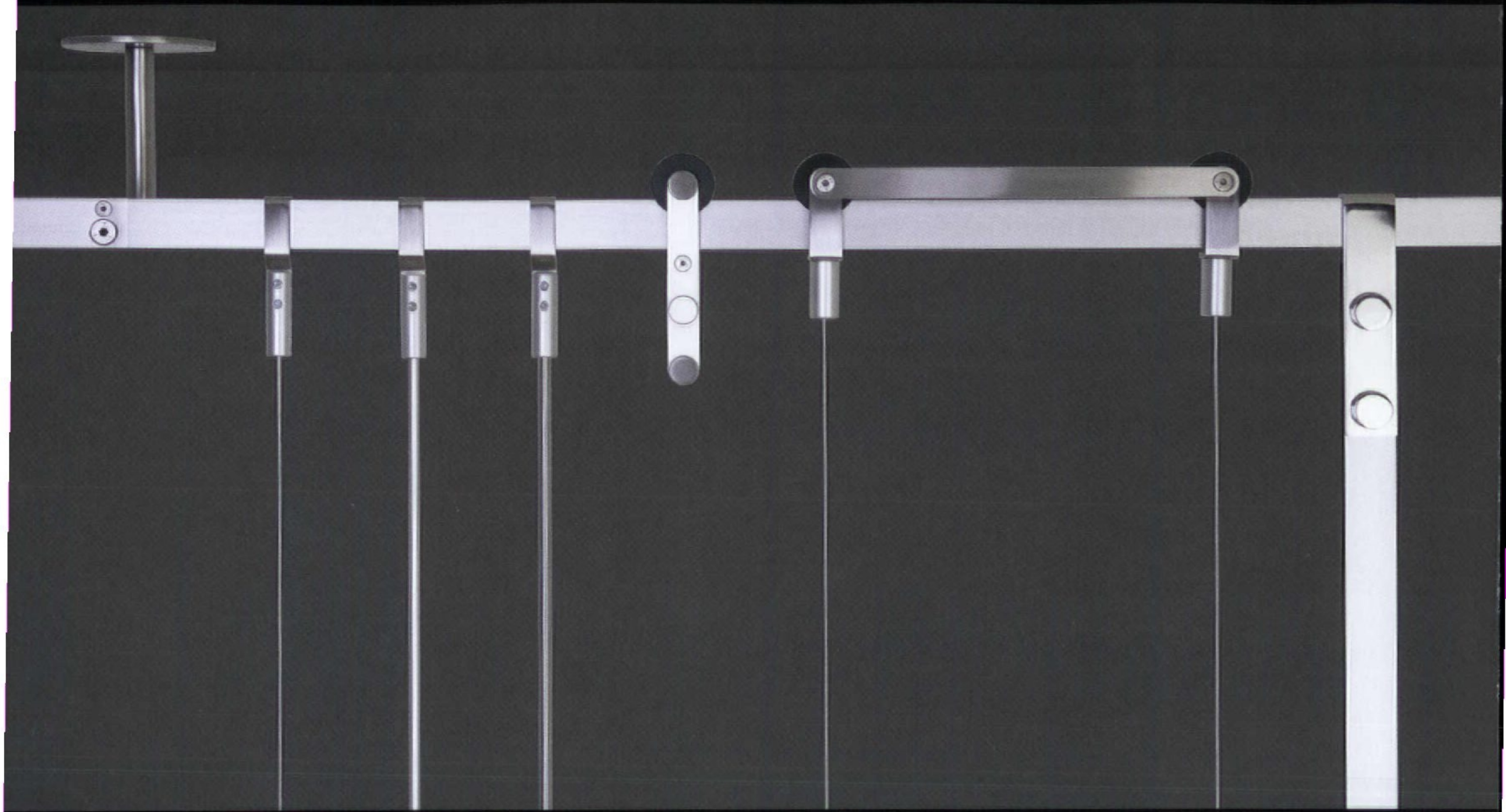

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# Editorial view

## In this pivotal issue, The Big Rethink introduces Integral theory as the basis for a more complete architecture

Einstein once remarked that: 'A problem cannot be solved by the same level of thinking that created it.' This rationale underscores the latest part of The Big Rethink (p67), which this month gathers momentum with a discussion of Integral theory, a rich, inclusive and transdisciplinary means of analysing architecture in both its objective and subjective dimensions.

Architecture and theory have a complex and often unsatisfactory relationship. Since the emergence of Postmodernism, the hijacking of literary or philosophical treatises into the service of architecture has sustained an intellectual cottage industry in academia and publishing. This must now be regarded as woefully misguided, as it disconnects architecture from historical, cultural and experiential reality.

Yet as anyone who witnessed Charles Jencks' and Patrik Schumacher's *pas de deux* at the lecture hosted by the AR at the Royal College of Art will know, reports of the death of architectural theory are greatly exaggerated (p86). And in these critical and epoch-shifting times, a new theoretical framework is required to evaluate and reconceptualise architecture in all its manifold dimensions and point the way out of the current intellectual impasse.

In the third part of The Big Rethink, Peter Buchanan explores the origins and nature of Integral theory and how it can be applied to architecture. Simply put, Integral theory is a means of analysing objective and subjective realities based around a system of quadrants. Each quadrant has its own intellectual disciplines and is organised and defined by specific criteria. For architecture this encompasses aspects such as aesthetics and phenomenology, semiotics, culture and anthropology (subjective, right-hand quadrants); function, ergonomics, form, construction and return on investment (objective, left-hand quadrants). As well as integrating diverse disciplines, Integral theory is also concerned with how living organisms, through consciousness, allow cultures to evolve and develop through distinct stages.

As Buchanan argues, this offers the potential to create better architecture through greater insight and inclusiveness. It can also be used to explain the shortcomings of existing movements. Modernism, for instance, concentrated primarily on the 'quantifiable reality' of the right-hand quadrants at the expense of those on the subjective left. This contrived to sever any empathic and emotional connection with humanity and the planet.

From this synopsis, it should be clear how Integral theory could frame a more resonant and complete approach to architecture. In effect it regrounds both architecture and humankind in the wider framework of history and culture while drawing on the rich narratives now unfolding from new understandings of science, ecology and the cosmos. And it reasserts that true 'sustainability' cannot be achieved without confronting the challenge of wider cultural transformation.

**Catherine Slessor, Editor**

# Overview

**JERUSALEM**

## Taking sides

World heritage or contested heritage? UNESCO has become embroiled in a political dispute between Israel and Palestine, reports *Schmuel Groag*

At the end of last year, the general assembly of UNESCO accepted Palestine as a member. The Israeli reaction to this act was dramatic. The government of Israel froze its connection with UNESCO and approved 2,000 new settler homes. The more significant effect on UNESCO was the US government's decision to freeze its annual support of $80 million, just over a fifth of the organisation's budget.

This clash of culture, heritage and new settlements is longstanding. The political conflict between the Israelis and the Palestinians is fuelled by a heritage debate about authenticity. Both nations are trying to prove they are the indigenous inheritors of the land and custodians of its holy history.

As a UNESCO member, Palestine now has the right to submit applications for significant historical sites to be declared World Heritage status. At the end of January, the city of Bethlehem and the Church of the Nativity were submitted as the first Palestinian nominations. Bethlehem is the first on an inventory of 20 sites that had already been submitted to the World Heritage Committee in Durban at 2005.

The 2013 nomination will be the city of Hebron and the Tombs of the Patriarchs. Today this is one of the most sensitive sites in the West Bank. The 600 Jewish settlers that live in the heart of the old city control its daily life, so the Palestinian move to declare Hebron as a Palestinian World Heritage site undermines Israeli military and political hegemony. Something similar happened in 1981 when the old city of Jerusalem was nominated a World Heritage site by the Jordanian government. This nomination was accepted, possibly because of the fact that Israel had already conquered and annexed East Jerusalem in 1967.

The Israeli resistance to recognising and accepting Palestinian heritage is rooted in the conflicting pressures of history and politics. On the cultural-historical level, Israel is haunted by the fact that its existence is based on destruction. Over 400 Palestinian villages were destroyed after the creation of the state of Israel in 1948, and 700,000 Palestinian refugees were uprooted from the country. At the political level, UNESCO's decision reflects both broad international recognition and support for the Palestinian case.

For many years the Israeli state tried to erase Palestinian cultural heritage inside Israel. The return to a national territorial identity involved an attempt to eliminate these same parameters of Palestinian indigenous existence and presence in the landscape. Elements of geography, data and cultural heritage were the target of erasure in order to realise the imaginary 'tabula rasa' of the land, precipitating a 'cultural cleansing' of Palestinian heritage. Last month there was a hint of change when an Israeli court in Jerusalem stopped a development plan on the site of the village of Lifta. This village at the western entrance to Jerusalem is the only one to retain its original structure

AMMAR AWAD

**A scout flying the flag of Palestine in front of the Church of the Nativity in Bethlehem, nominated for UNESCO World Heritage status**

and has become an unofficial memorial to the other destroyed Palestinian villages.

The situation in the occupied territories of the West Bank is different. Part of the political struggle over the future of the occupied West Bank is focused on the future of about 250 Jewish settlements. Some of the settlers in some of these settlements base their right to be there on military power and biblical promise. Two years ago, the Israeli government announced a national heritage plan that included two sites in the West Bank: Rachel's Tomb in Bethlehem and the Tombs of the Patriarchs in Hebron. After strong international pressure those two sites were removed from the plan.

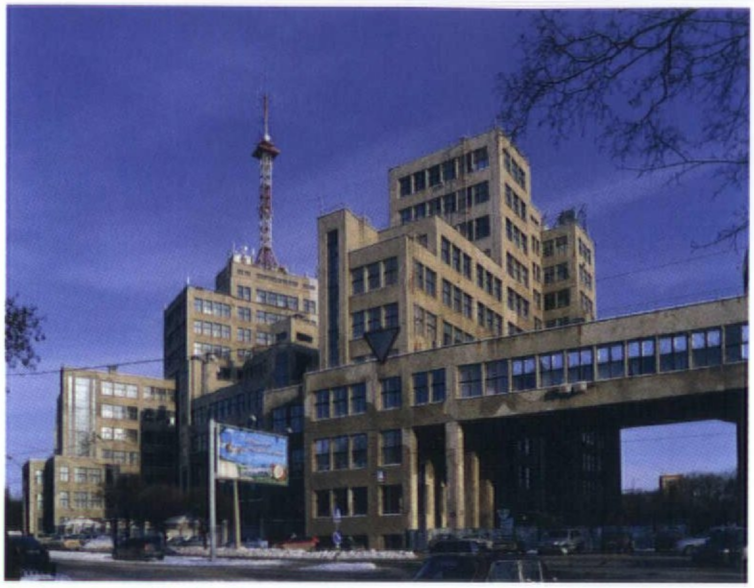
The concept of world heritage was originally intended to enhance the universal significance of chosen sites rather than encourage them to be seen as national symbols. That aspiration has proved illusory, since it seems that politics and heritage cannot be separated. The question now is how to mitigate the corrosive effects of this relationship.

**KHARKOV, UKRAINE**

## Ukraine joins Docomomo

*James Dunnett*

Ukraine, sixth nation of Europe in population, has just added its name to the Docomomo roster, launching its own national chapter with a three-day conference in Kharkov devoted to its Modern Movement heritage. It is joining Docomomo – the international association for the study of the Modern Movement and conservation of its works – none too soon. Its most famous asset, the Gosprom or 'House of State Industry', of 1927, is undergoing a controversial restoration, to which attention was drawn in the Royal Academy's recent *Building the Revolution* exhibition.



**The Gosprom complex by Ukrainian architects Serafimov, Kravets & Felger (1927)**

Reyner Banham remarked of the Gosprom in his encyclopaedic *Theory and Design in the First Machine Age* (1960) that, together with the Van Nelle Factory, 'these two works from the extremes of the Elementarist-Constructivist territory were the only contemporary works of the Modern Movement to rival, or exceed the scale of the Bauhaus buildings'. Rising to 12 storeys and occupying a quadrant of 100° around Kharkov's circular Dzherzhinsky Square (now Freedom Square), it certainly exceeds in size the Bauhaus buildings by a very substantial margin, and the Van Nelle Factory too – an astonishing affirmation of the organisational power of the centralised Soviet state in 1927. But the Van Nelle Factory six years ago was the subject of very careful restoration and conversion into a design centre, in which original glass and fenestration were conserved throughout, while the windows at the Gosprom have all recently been replaced with box-section aluminium, including dummy glazing bars between the panes of the double glazing units, and the original rough unpainted rendered wall surfaces are being replaced by something smooth and white.

Though the Gosprom is the iconic building of Kharkov, it is not 'listed' under Ukrainian law, and Icomos have reportedly now declined to nominate it as a World Heritage Site – because it has lost its original windows. But it is a big-boned building, never very refined inside or out, and able to withstand some rough treatment, so the architectural force of its cumulative composition and complex massing remains very potent. Its scale is reminiscent of Fritz Lang's Metropolis. It stands now in a curious state where details such as the men's WCs and the radiators and at least some of the lift cars and electrics and the magnificent timber revolving doors look untouched since 1927, while the new windows have a very contemporary banality. It is a building that needs to remain in active use, but its restoration does appear haphazard. A glance at Aalto's Viipuri Library on the other side of the former Soviet Union would show how carefully Modern Movement conservation can be done – with funding there from the Russian government and architects from Finland. Though Docomomo-Ukraine is probably too late to influence the works to the exterior of the Gosprom, there remains a major question of how the interior should be renovated – which will not be a task for the faint-hearted. There remains a considerable Modern Movement legacy elsewhere in Kharkov, which was the capital of the Ukrainian SSR for 15 years – even though the theatre for which there was a famous international competition in 1930, won by the Vesnin brothers over Gropius, Mendelsohn, Breuer and other international contestants, was never built.

Many of the more prominent examples, however, were 'Stalinised' in the 1940s and '50s – a layer of overscaled kitsch Classical detailing was applied over the surface, some of which is now becoming detached. This is true of the former 'House of Projects' of 1932 – now Kharkov State University – which rises to 15 storeys and was designed to complement the Gosprom on the adjacent quadrant by the same architect. It was more badly damaged during the war than the Gosprom itself (which survived German attempts to set fire to it on departure), and the restoration provided an opportunity to overclad it in approved style. When both were in original form and visible together uninterrupted by the trees latterly planted in the centre of the square, the effect must have been overwhelming.

Indeed so overwhelmed was *The Architectural Review* when it published the Gosprom in the May 1932 issue edited by Lubetkin, that it gave its height as 22 storeys, nearly twice the actual, and complained of its megalomania, while admitting that 'from a distance, it is undeniably grand and impressive'. Equally it is doubtful whether Banham was correct in assigning it to 'the extremes of Elementarist/Constuctivist territory'. Its symmetry and axiality would be untypical, and the lead architect Sergei Serafimov was of an older generation and from St Petersburg – not part of the Moscow group associated with

Constructivism. Such architects were aware of the power of curving perspectives, which were equally visible inside the contemporaneous Railway Workers Club in Kharkov by Aleksandr Dmitriev. In some ways the composition is more similar to contemporary semi-academic projects such as those in London of Charles Holden at St James's Park Underground Station or the University Senate House. But at the Gosprom, a 'Constructivist' glory in repetition and spatial exuberance typified by the dramatic bridges linking the blocks permeates the composition and gives it a life quite absent from Holden. The latter-day television mast crowning the tallest block too has an appropriate Constructivist flavour, though many original interiors were reportedly destroyed when the television company moved in.

A closer UK comparison might be Ernö Goldfinger's Alexander Fleming House at the Elephant and Castle, built 30 years later. A large office building that served for 40 years as the Ministry of Health, located on a roundabout, with parallel blocks of cumulative height arranged axially and linked by bridges, its design may in part have been inspired by the Gosprom. Now converted to housing, renamed MetroCentral Heights, with its cinema demolished, it has suffered worse damage than the Gosprom despite its shorter life.

**LONDON,UK**

## Medallist mettle

*James Pallister*

Herman Hertzberger's two-day visit to London saw the RIBA Royal Gold Medallist both decry Patrik Schumacher as a 'monster maker', and heartily agree with Zaha's right-hand man's point that British architectural education must move away from dystopian speculation. Speaking at the RIBA, the 79-year old architect called for a more practical approach to architectural education and lamented that 'architecture had become a varnish on society'.

RLING 1915 · SIR ROBERT ROWAND ANDERSON 1916 · HENRI PAUL NENOT
LOUIS GIRAULT 1920 · SIR EDWIN LANDSEER LUTYENS 1921 · THOMAS H
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1929 · SIR PERCY SCOTT WORTHINGTON 1930 · SIR EDWIN
1933 · HENRY VAUGHAN LANCHESTER 193 · WILLEM M

**RIBA Gold Medallist Herman Hertzberger with President's Medal 2011 winners**

In response to Schumacher's piece in last month's AR, which criticised the RIBA for rewarding dystopian projects removed from reality, Hertzberger seized on the wild disjuncture between Schumacher's writings and his work. 'Patrik Schumacher, the man who works for Zaha Hadid Architects? He's a monster maker! In Rome, they made the MAXXI museum. There was a very big industrial plant, which they could easily have transformed into a nice museum, but they have torn it down to make a new monster!'

Since Charles Jencks published *The Language of Post-Modern Architects*, a whole generation of second-rate architects had been allowed to produce 'what they wanted', leading to a lot of poor quality work, Hertzberger argued. He built on this point in his lecture, given to a packed, and unusually well-heated RIBA lecture hall: 'You should only make things that work, not just things that are attractive, or funny, or impressive.' And in a sideswipe against today's icon culture, he said that 'Architects try to make the special ordinary. We should do the opposite.'

The octogenarian had a few jibes at his fellow architects, singling out the 'amazing' stepped building by Bjarke Ingels Group (BIG), before lamenting that the only decent social space was in the car park. Praising Norman Foster's Hongkong and Shanghai Bank, he quipped that: 'It proves you only have to make one great building to be considered a great architect.'

Hertzberger also revealed that his classic Centraal Beheer building is currently being assessed for possible change of use to a school. 'I would be delighted if that was the case. I would love it if my Centraal Beheer was turned into a school in my lifetime. That would be the proof that it is possible to make a building that is generic but not dull.'

Architects, Hertzberger said, must 'become experts in daily life'. Observation of life was crucial and must underpin all architects' systems, he said. 'Too many architects have no idea of what people are – they see them as dangerous animals that they have to deal with.'

When it came to the President's Medals crit the day after, Hertzberger – although polite – seemed more sympathetic to Schumacher's point that the Medallist projects' reliance on 'improbable narratives with intended symbolic message' was something of a dead end. Presented with the Robots of Brixton project, he seemed exasperated: 'I'm an old-fashioned guy. I don't want to change the world any more but I don't want to see it get any worse. Use your talent to save the world!'

Writing in the AR in December, William JR Curtis speculated that in giving Hertzberger the medal, perhaps 'the jury wished to signal a reaction against the bling bling narcissism and excessive gestures of recent years?' Maybe a touch of Dutch practicality will hang around in Portland Place. After the pronouncements of this unlikely Hertzberger/Schumacher alliance, perhaps next year, the President's Medals jury will catch up with the mood of their Gold Medal equivalents.

**AR COMPETITION**

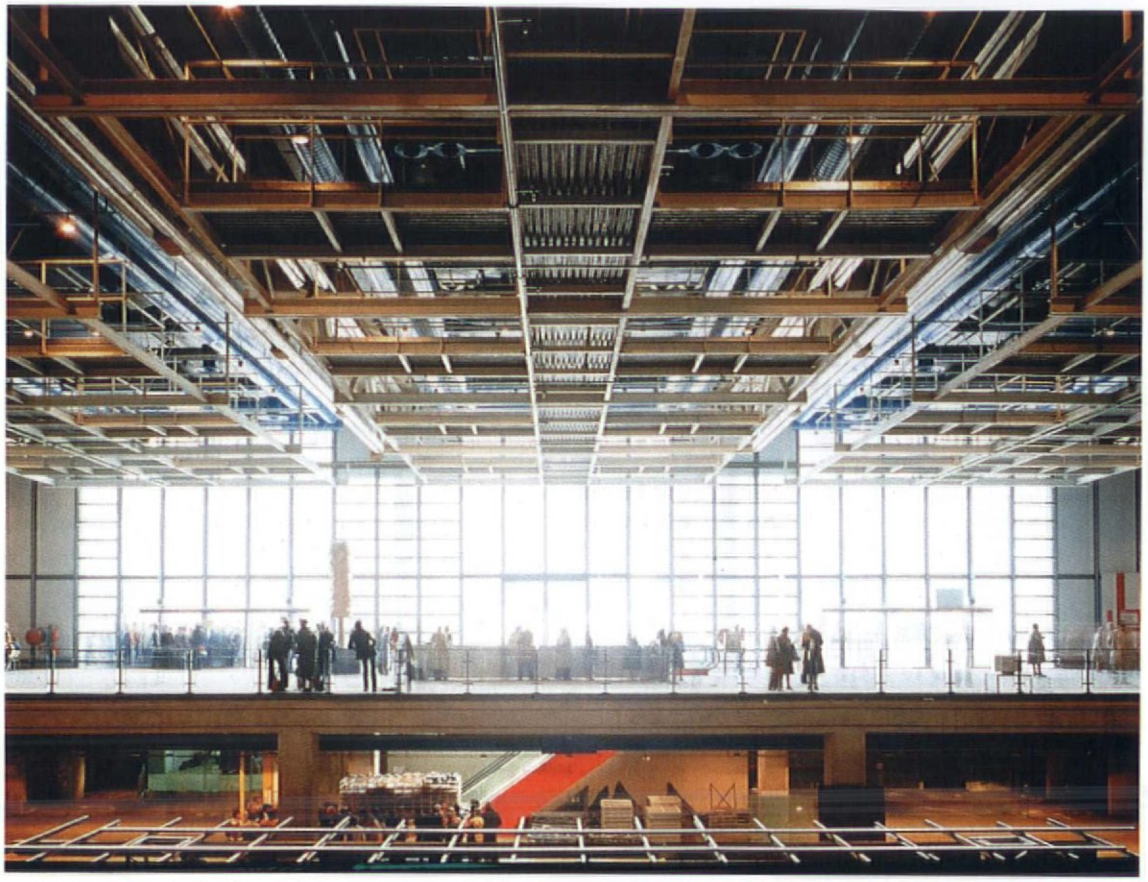
## The launch of AR House 2012

*The Editors*

AR House 2012 is open for entries. Now in its third year, this annual competition celebrates domestic innovation with a major award of £10,000 for the design of the best one-off house. All projects must be built. There is no age limit. Entries will be judged by an international jury, including Peter Salter (UK), Sofia von Ellrichshausen (Chile), and chaired by Catherine Slessor, AR Editor. Entry deadline is 27 April.

☞ **For full information visit architectural-review.com/ARHouse2012 – to enter please use the priority code ARH12**

**House in Chile by Pezo von Ellrichshausen**



**Photographer Martin Charles captures the essence of the Pompidou Centre. See more at architectural-review.com/MartinCharles**

OBITUARY

# Martin Charles (1940-2012)

*Peter Davey*

Martin Charles, the outstanding architectural photographer, has died aged 71. He was the son of an architect, the distinguished and lively expert on historic timber-framed buildings, FWB (Freddie) Charles (1912–2002), who set up a conservation practice with his first wife Nancy in 1962. Clearly Martin was influenced by his parents' preoccupations, but after graduating in drama from Bristol University, he began working life as a BBC trainee film editor. He proved adept, and after leaving the corporation following precocious successes, he edited six feature films in as many years.

The track record must have given him confidence, but, as at the BBC, Martin was too lively and individualistic to abide the complicated disciplines demanded by the film industry. Very bravely, with no specific training, he set up on his own as a freelance architectural photographer, exchanging the comparative security of the cinema world for a life at the mercy of the weather, architects' egos and the wilfulness of editors. But he had found his metier. His work was clearly outstanding and he was published in the AR from the beginning.

He was one of the first architectural photographers fully to embrace the potential of colour. By the time Martin started, innovations in technology and printing machinery had enabled colour imagery to be used extensively in architectural magazines, but he was one of the first to understand the potential of the new processes. Now, coloured photographs are regarded as completely normal: then they could be eye-opening. Even in black and white, Martin was particularly good at capturing atmosphere, and he understood the importance of darkness in a photograph. Unlike many photographers, he avoided the trap of making everything seem as if it was in California, partly because he always studied the project in detail and, when possible, discussed it with the author and the architect.

He had an English sensibility for the making of things: for materials and construction – an echo perhaps of his father's work, some of the most original of which focused on the design and construction of joints in medieval timber-framed buildings. For *The Architects' Journal*, as well as celebrating new work, Martin illustrated an innovatory and revealing series called 'The Masters of Building'. Edited by Dan Cruickshank, the articles (later published in book form) examined totemic buildings from the past in detail using techniques that would normally be applied to modern work and Martin's approach was ideally suited to the project.

Martin's work was far from being limited to old buildings. He became much sought after, and travelled the world from Cuba to South-East Asia to fulfil commissions from numerous magazines and book publishers. He was a delightful companion, sunny, witty and with a slightly high-pitched but very infectious laugh. He could get a bit grumpy with the weather sometimes, yet would regularly return to a shoot to capture the light as he imagined it should be. I can only remember him losing his temper once. We were in Hong Kong, having had a week studying Foster's bank just before it opened to the public. On the way home, a customs official suddenly demanded that he should open the taped and sealed packages in which his undeveloped film and plates were protected from light. A week's passionate and expensive work could have been ruined. Martin lost his jokey cheerfulness and became very fierce and firm in an argument that seemed to last for ages. Eventually, Martin won by sheer determination and toughness. (Those were the days before 9/11, but I think that he would have been the victor even after that dreadful date.) The altercation showed the tip of the inner strength that made him such a brilliant photographer.

Martin died after a three-year struggle with myeloma. He leaves two sons and his wife, Tessa Carter, who was a quiet and constant comrade, at one point giving up her profession of graphic artist for a while to become a primary school teacher, supporting him in his fledgling career. It is difficult to think of the world without Martin and his cheery presence. I shall miss his laughter, his enthusiasms and his insights. Thank goodness we still have his images.

# Broader view

## The urbanist's holistic vision

Clinical psychiatrist *Mindy Thompson Fullilove* advocates mending the fracture between rich and poor communities for a healthier society

As a physician, I am trained in recognising pathology. Vacant lots draw my eye the way a wound would. For me, starting with the wound seems like a good idea. But, in fact, sometimes in medicine the obvious wound can obscure the more important disorders. An open sore on the foot can mean serious, untreated diabetes, for example, and we would not be able to treat the foot without treating the whole body. 'The same is true for cities,' said French urbanist Michel Cantal-Dupart, when I first met him at a 1993 colloquium in France. That meeting was focused on AIDS, homelessness and substance abuse, disorders of the modern city that, Cantal-Dupart argued, both arose from its malfunction and required its repair for resolution.

Yet it was not the obvious problem of dysfunction in poor neighbourhoods that he wanted to bring to the attention of conference attendees; but rather the fracture between rich and poor ones. He noted, 'I am convinced that there is a close connection between the signs of exclusion and the shape of the city, whether it is poor neighbourhoods or whole cities that have been shut out. We find neighbourhoods far from everything, without means of transport, where many are unemployed and where there are numerous young people. We find the names of those neighbourhoods in the newspapers. We also know that those neighbourhoods are the ones with high rates of illness.'

The shape of the city was what demanded our attention, he averred. I have visited many of Cantal-Dupart's projects directed at identifying and attacking exclusion. For example, he entered a competition to design the grounds for a school for prison guards. The call for proposals said they were interested in surrounding the school with a wall, placing a restaurant – to be shared with another school – at the entrance, and the school building at the rear. 'That,' he said, 'is a design that replicates the prison, with its visiting facilities near the entrance and the housing for the prisoners near the rear. But our national policy is to help our prisoners return home as productive members of society. How can the guards accomplish that if they've been trained to be in prison themselves?'

He made a counter proposal. 'Let's place the school in an open park, based on the most elegant example of French landscape design, Vaux-le-Vicomte, the model for Versailles. Place the school building at the entrance and restaurant across the park. Let the students from the other school enjoy the passage across your grounds. Make your school a part of the city, just as the prison will make its occupants a part of society.' His proposal was accepted and the school built. From within the school grounds, a reed-lined canal filled with frogs draws the eye to a church in the distance, an open perspective that embodies the freedom of the place. In 2011, people from the area called for the beautiful park to be included on the list of the patrimony of France.

In the United States, exclusion in our cities has evolved over more than 100 years, driven by a long list of policies that instituted segregation, overlaid redlining to drive investment away from poor African-American districts towards wealthy white neighbourhoods, and instituted a series of displacements, driving non-white people from wherever they settled. This complex, active process of 'sorting-out the city' is constantly reorganising our districts, moving populations, erecting or erasing lines according to who is where, but always enforcing separation and hatred. The great sign of this system is the vacant lot, but if the eye lingers on the obvious sore, we miss the systemic disease of sorting-out the city.

'AIDS, homelessness and substance abuse are disorders of the modern city that have arisen from its malfunction'

American urbanists Ken Doyno and Dan Rothschild, principals of Rothschild Doyno Collaborative, have attacked this problem in Pittsburgh. Like other American cities, Pittsburgh was sorted out by ever-finer distinctions of race and class, and money was driven preferentially to rich white areas while poor black areas were left to rot. RDC's work focuses on identifying the forces of dissolution at every level, and using that analysis for designs that 'align and connect', always referring to every scale, from the most intimate to most abstract.

The small American city of Braddock was once a centre of the steel industry with a Main Street that ran for two miles along the regional road, Braddock Avenue. RDC was commissioned to build affordable senior housing on that street. It was the first new investment after years that had taken a heavy toll: most of the buildings were gone, and the businesses closed or moved away. This new building, they thought, had a heavy responsibility to the city, a duty it could meet by reinvigorating its Main Street. RDC used many tools of connection to solve this problem, putting social rooms on the street with floor-to-ceiling windows so that the building's lounges were also the city's lounges. A set of outdoor benches echoed that welcome. They hung a light high in a building well, burning day and night to call to the side street that connected with Braddock Avenue at that point.

The problem was parking. They couldn't put the parking completely underground, so the half-buried parking would present a blank wall to the street. They decided to use a public art

**A wound in the landscape: lack of social cohesion leads to voids in the city as depicted in *Chicago, Illinois: Public Art* by Franklin McMahon/CORBIS (1978)**

project to enliven that part of the building. Dan Rothschild told me about his first meeting with the citizens' art committee. Five people who had always lived in Braddock were assembled to discuss the content for the art work, but before every meeting, they passed the time telling stories about their lives in Braddock. In the second meeting they told more stories; and in the third meeting yet more. Dan, who had been wondering how to get the committee focused on the content of the project, realised that their stories were the project. What needed to be displayed on Braddock Avenue was a celebration of the stories of the people of Braddock.

> 'Money was driven to rich white areas while poor black areas were left to rot'

Artist Robert Qualters, who mixes storytelling with painting, created a collection of murals that depicted significant places, people and events and quoted generously from what residents had to say. Each panel faces a bench, creating the classic memorial triptych of seats for the guardians, pavement space for the passers-by and casual observers, and space for those who needed to move in closely to honour their losses.

Rothschild related to me that, 'There isn't a neighbourhood in this whole country where people relocating back to Main Street couldn't use this display of securing a community's memories as a model.'

I was driving through Braddock with Ken Doyno one morning and I was stunned by the number of vacant lots. His conversation, however, was about how critically important it was that there was no money to build a highway currently on the books. 'That has been a terrible blighting influence on the neighbourhood, making people afraid to invest because it would be lost to the highway,' he explained. Or he talked about construction projects that were on the drawing boards and the valiant and righteous efforts of public officials to get money for building them. 'You don't think about the vacant lots, do you?' I asked. 'No,' he said. 'People love this place and we're going to rebuild it WITH them.'

# View from...

ANDRIS FELDMANIS

**The Café Boheem in Kalamaja by architects Maris and Kadri Kerge is one of many bohemian eateries recently to open its doors to an expanding middle-class clientele**

## Tallinn, Estonia

The city's inhabitants are experiencing a newfound pride in their capital and an optimism for the future, observes *Villem Tomiste*

The scars of war are often entrenched deeper in a city than the following two or three generations can fix. While you can smooth out the bullet-holes and substitute the ruins, you can't regain the substance once it has been squeezed out.

Historically, the urban texture of Tallinn was relatively dense. But at the brink of the Second World War, occupation by the Soviet Union saw 10,000 inhabitants deported to Siberia. Then, in 1941, the Germans took their turn. Only after they started to withdraw did the Red Army launch the bombing raids that almost exclusively targeted the city's living quarters. The threefold occupation displaced Tallinn's indigenous inhabitants, depriving the city of people who remembered how to use it.

Since most of the industrial capability was spared in the bombings, there remained the potential for capital regeneration. Most of those who disappeared during the war were replaced by immigrants from across the Soviet Union. The lack of habitable space now became a problem, so new workers had to be imported in even greater numbers. New housing was required and it had to live up to the ideals of Communism, and by proxy to lazy Modernism.

Even the existing urban fabric was adjusted to the norm. Private space was contradictory to Communist ideology and of suspicion to an already paranoid system. The high fences surrounding the small apartment buildings were torn down; cafés – bourgeois by nature and full of shady characters – were shut down too. The destruction of private escapism – so essential to any city – was at last complete. The only thing that was fenced up was the view towards freedom, an entire coastline barbed-wired as Tallinn's waterfront was occupied by the military. So even the advantages given by nature were eliminated – for everyone.

The regained independence at the beginning of the 1990s actually deepened the fallout of the disintegration of urban living. The possibility of possessing somewhere of your own had an unwelcome effect, as the massive voluntary emigration to the suburbs left the centre almost undeveloped. The first place in the city that actually gained from the newfound freedom was the Old Town, which had descended into an almost ghetto-like state during the Soviet years. The historic core was yanked out of despair by a new generation, and this good-willed contagion spread to the wooden-house-boroughs surrounding the compact stone-clad centre.

The life that has returned to those districts that were occupied by workers and laymen during the First Republic is probably the most viable in the whole city. It is connected and adjacent to the core while fulfilling the expectations a normal person would have for a home – it is cosy, natural and humanly scaled. The typology of these buildings seems to be a phenomenal social generator: yard concerts, apartment cafés, borough societies and so on. But as we learned from Tallinn's urban destruction, it consists of two parts. The physical part is still in an unhappy state; its core lacks the social dimension that is alive in a developed city.

For many years the waterfront has been virtually empty and unused. Now seems to be the time for the city to reclaim her most exclusive and distinct part. Systematic revitalisation works only if it integrates new cultural edifices like the Maritime Museum, housed in the former floatplane hangars, or public symbols like the new City Authority's Administrative Building (by BIG). But all efforts would founder without links between public and private. We really have to start from scratch.

And so we have: the Mile of Culture connects these two public behemoths and is flanked by many smaller buildings. Now we just need to connect it to the rest of the city – buildings alone will not make a city. So it is encouraging to see Tallinn promoting herself by enticing us with new ways of using her while sheltering us in the warm embrace of worn-in homes.

# Viewpoints

**WILLIAM JR CURTIS**

## The narrow provincialism of the present – maintaining a historical perspective

Architecture today suffers from technological mystification and smokescreens of theoretical jargon. I recently attended a conference where a well known theoretician delivered a speech on Deleuzian folds, Leibniz's monads and much else in a sort of fictionalised version of the history of ideas, then in the last 10 minutes suddenly jumped forward to Jürgen Mayer's Seville Metropol Parasol, as if it fulfilled the 'theoretical agenda'. When I pointed out that this scheme is a piece of techno kitsch destroying a historic urban space – a collection of poisoned mushrooms from the era of 'icons' – the person in question had little to say. He had never been to Seville and never experienced the project apart from some sexy promotional photographs. So how on earth could he judge it? This illustrates why the critic should be suspicious of a priori ideas and ideological positions.

Needed is a non-doctrinaire approach open to fresh inventions, to works which add something substantial to their place and to the general culture of architecture. Buildings speak to us directly through space, form, image, material, detail; and they touch us on many levels mentally and physically. That is why it is so important to base judgements on the experience of buildings themselves, and to gradually penetrate to the thought processes and structures of intention which lie behind them. Interesting works of architecture do not reduce themselves to 'positions' or to theoretical slogans. They are not there to fulfil academic agendas. Many works that are proposed as radical innovations fade away because they are transient, without formal presence or underlying content. It is crucial to step outside the provincialism of the present and to maintain the long historical view.

Today it makes no sense to pretend that there is an avant-garde in touch with a supposed zeitgeist and that all else is marginal. Some try to impose an exclusive regime of dogma, for example by promoting 'parametricism' as the sole 'architecture of the times' or as 'a new global style'. But their exclusive claim is hollow in a period when quality (and its opposite) takes many forms. Moreover does 'parametric' refer to a method or a style? If it is a method, there is no reason that forms should end up with complex geometry. If it is a style, there are many other ways of achieving complex forms. The links in this ideological fiction are loose. Anyway, the real question for the critic is this: do the results succeed as architecture?

One has to keep coming back to the realm of specifically architectural ideas and to buildings in real space, not just seductive images on the computer screen. There are no short cuts in this domain, and mathematical tricks with software are no substitute for substantial architectural thinking, a rigorous architectural language and a culture to back them up. There are complex curves, folds and irregular geometries which mean something and add to the stock of authentic architectural inventions; and there are others that are meaningless, arbitrary, ugly to look at, hell to live in and destructive of their setting whether in landscape or city. Many of the buildings that fly the flag of 'geometrical complexity' are simple-minded and transitory.

There is a weird scientism ('science envy'?) which pretends that one should abandon human intervention altogether and let the machine do the designing. This is a naïve technological determinism: what comes out is only as good as what is put in. Moreover this risks sidelining the architect who, replaced by the developer and the engineer, is doomed to simply supply a little packaging here and there in the form of a shiny skin. Once the smokescreens of 'innovation' blow away one is left with some challenging comparisons. Is there anyone today who can equal the sculptural and symbolic resonance of the Sydney Opera House? Or who can match the haunting presence, meanings, spatial and geometrical sophistication of the curved side chapels in Le Corbusier's La Tourette? In these cases the curves are embedded in the deep order of the building itself and in the mythical structure of the architect's creative universe, including transformations from the past. There is a huge difference between an abstraction which distils experience and content, and one which derives from a superficial play with arbitrary forms. As always, quality transcends period and style.

**LAST WORDS**

'Nothing would be worse than all your complexity. I love your buildings, I love your beauties, just don't give me too much of them, I'll get fatigue.'

**Charles Jencks to Patrik Schumacher at the RCA/AR lecture on Style, 2 February**

'There is a backlash against me... The notion is that curving a wall or doing something so-called wilful is wrong and so there is a tendency back to bland.'

**Frank Gehry interviewed by Rowan Moore, the *Guardian*, 19 February**

'I hate corridors. For me, this whole profession is a fight against corridors.'

**Herman Hertzberger speaking in London to receive the RIBA Gold Medal reported in *The Architects' Journal*, 16 February**

# Your views

## Alison Brooks, judge of the President's Medals 2011, takes issue with Patrik Schumacher

I agree with Patrik Schumacher (*Overview*, February) that for many years architecture schools have been generating projects based on fictional narratives, with a predominance of what I describe as industrial romanticism. There are very few thesis projects offered by architecture schools that respond to the pragmatic challenges to which architects respond in practice – basic questions of inhabitation, enclosure, materiality, durability, budget, client and environmental cost. Architectural education has for many years relied on supra-fictional scenarios to allow students to develop their creative imaginations, to take us places we've never been before. It's as if we allow one last bout of wishful thinking before The Fall.

However, as a juror for the final stage of the selection process, I saw something more in this year's medallists' projects – something that made a connection between the fictional and the real, that conveyed a conviction that architects can, through their work, communicate the need for social change for which architecture is one of many agents. Particularly in the case of Robots of Brixton, this was polemical work – one could argue in the tradition of Rem's (collective) AA thesis Exodus – but from a completely different and contemporaneous perspective. Initially sceptical, we jurors found the narratives of the winning projects had their basis in extraordinary quantities of research, thick books of investigative material, design and processes unfortunately not on view at the RIBA exhibition. The best projects convincingly distilled this research along with the author's observations, objective and subjective analysis – sometimes extending to compassion, empathy, satire, humour. They were clearly social, environmental and political allegories as much as architectural projects. But is this not also a valid position for an architectural student at thesis level? I agree that 'critical architecture' doesn't substitute for the political process, but it contributes to it through a discourse that emanates beyond the confines of the architectural.

When the thesis takes a further leap into animation, character and screenplay, as in the Silver medallists' scheme (pictured, left), it moves outside the limitations of architectural representation as we know it. The 'designed' environment is only part of the story of architecture with this medium. The way the environment is used or disused is more relevant. The architectural imagination and the project is inhabited by personalities and characters with whom we are encouraged to empathise, rather than abstracted populations and processes to which the profession is more accustomed.

The portfolios of the students showed an extraordinary level of skill in visual communication and digital tools, used to describe not only architectural qualities and atmospheres, but components and strategies. I came to the conclusion that this 21st-century student work is perhaps more tolerant and humane, rejecting our latent Modernist expectations of the architectural project, the heroically transformative partis. It is accepting of dirt and time; it's not obsessed with newness. Maybe this is the spirit of the age – they are the first generation in 500 years that will not achieve the standard of living of their forbears (us).

**Alison Brooks, London**

Patrik Schumacher has certainly never received so much public support as following last month's AR article. Though what is perhaps most shocking is how long it has taken someone to publicly admit to what so many of us think – that academic projects are increasingly using 'improbable narratives' as entries into superficial and 'ironic allegories'. The accusation of avoiding reality is both blatantly true and painful to accept. Privately, we all die a little when confronted with yet another monochromatic 'atmospheric' render, incomplete without the obligatory flock of birds.

But Schumacher can't have it both ways, decrying experimental projects as 'naïve (if not pompous)' while also telling us that architects in general are 'neither legitimised nor competent to argue for a different politics'. This statement is indicative of the apolitical projects that Parametricism has thus far produced, and is also typical of the late-neoliberal ideologies that transformed the architect into an agent of a deeply flawed and ethically dubious economic model (which has now spectacularly imploded). The result of excusing architects from public political discourse has been to create a whole generation of meek and apathetic students. In any case, if we accept that architecture is a social sub-genre (*sui generis*), even Plato tells us that all citizens have the right to speak as equals about politics and philosophy. As the late, great Alvin Boyarksy once said: 'Rise above your situation ... look at the scene around you, the context in which architecture is made, and introduce a political note to your work.'

**Jack Self, *Fulcrum* magazine,**
**Architectural Association, London**

## Responses to the AR's campaign

The February issue of the AR was, in my view, nothing short of ground-breaking. Peter Buchanan's second offering on The Big Rethink was both radical and brave: radical to advance the sacrilege that perhaps it all started to go wrong with the advent of the Renaissance – man becoming the measure and so forth; and brave to enter into 'the unknown' in search of the answers that we all seek. Citing the cosmos and Gaia among other things in his elucidation of an

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alternative to the reductive mechanistic paradigm may elicit ridicule, but in doing so, Buchanan shows the kind of intellectual bravery that is all too often noticeable by its absence.

So it comes as a genuine shock to read Rupert Sheldrake (*Broader View*, AR Feb), which appears to go even further by beginning to suggest that Nietzsche was wrong when he said 'God is Dead' and that modern society's zealous adoption and implementation of this maxim is largely responsible for its current predicament. Many of your readers will find this uncomfortable reading. This is the kind of editorial content that leaves one open mouthed.

As regards the practicalities of an alternative paradigm however, I found the central editorial proposition – that modern science in the form of the internet and smart grids will save us where fossil fuel-driven industrialised technology has all but destroyed us – to be, well, a little weak. Is this really tenable?

Take, for instance, the hydrogen fuel cell (which Peter Buchanan cites while describing Rifkin's concept of energy-producing buildings), an amazing piece of technology that gives us electricity with only water as a by-product. The fuel cell is perhaps the perfect example of modern technology as panacea, but we must be careful to keep in sight the realities associated with it. Firstly, the embodied energy associated with not only the production of a single unit, but the development of the technology as a whole. Then there is the fact that fuel cells don't make energy out of nothing, but merely convert renewable energy into electricity. In the simplest sense, this leaves the users of fuel-cell technology at the mercy (or otherwise) of the natural rhythms of the planet, the internalising into human society of which, Buchanan (and presumably Rifkin) astutely identify as being vital to any future paradigm of human existence. Living in accordance with the earth's natural rhythms will mean that we all have to consume less, it will probably mean the death of music, fashion, TV and modern culture as we know it, no bad thing perhaps but the profundity of the change needs to be fully considered.

The knowledge economy which is dependent on the outsourcing of industrial and manufacturing processes to developing countries, is also incompatible with the new paradigm that we need. Are we not in danger of replacing one reductive paradigm for another? The supplement on schools (*Typology Quarterly*, February) is instructive in this regard. Self-learning is all very well, but human culture depends on knowledge being properly passed on from one generation to the next, it always has done and always will do, surely? So perhaps Aldo Rossi was on to something when he proposed a school design that was not revolutionary but revelatory, drawing on old and even timeless notions of institution and culture and seeking to 'un-earth' a lost humanity rather than waste time and energy attempting to find it somewhere new. Rossi acknowledged that people like old buildings and he understood the poverty of Modernism enunciated by the likes of Venturi and Scott Brown, the poverty of a culture that discounts pre-industrial history and seeks to re-make society in the absence of its lessons, only to re-adopt those lessons as the 'Modernist project' encounters failure after failure.

Unnecessarily reinventing the wheel each time presents just the kind of inefficiency which has fuelled the fire of our corrosive industrialised capitalism, and is something we must be sure to avoid in future.

**Michael Badu, London**

A new editorial line is emerging in these pages, championed by the campaigning pen of Peter Buchanan. The implications of such a perspective seem wholly benign, and, on the face of it, worthy of enthusiastic if ingenuous support, save for the insinuation of clear and consequent anomalies within the argument.

A difference exists between two cords of philosophical thinking. The first is tied to Plato and to a subterranean dualism in which the original is veiled by the actual, rendering life a pale shadow of the real. The second cord is tied to Spinoza and then to Nietzsche, securing a view of the world as perspectival; tied to life, warts and all, relying on nothing other than the cultural constructions of the 'human all too human' subject in all its languaged and languaging forms. From the perspective of this second cord there is no dualism, which hides irreducible substance behind the appearance of things.

Life and its perspectives are as real as it gets; life and life only. It is the first of these philosophical cords that architecture ravels up. Futurisms establish a specious architectural economy of tribal posturing, whether these be Faustian utopias or dystopian coercions; the story is always proleptical and always the same. A presumed future is struck and considered already present; to be presented as yet another resolution to a problem inflated by an overriding political interest in centralising the discipline.

Let me put it brutally: there is no future! All things must be confronted through the eternally present. Nature is not Culture, and in the fullness of time, human cultures will be destroyed by it. There can be no return to nature because human cultures are the antithesis of nature and constitute its defining dialectical polarity. Those who proleptically urge a new vision which relies upon a so-called 'total' not to say ecological inclusivity, underestimate the scope of this demand, since they assume that nature includes them. It does not. Any human ecology, whatever its self-propagandising claims to totality, is always and already cultural; always and already partial, perspectival and limiting.

Architecture, in so far as it can disturb this emerging ideological landscape, will remain dominated by the seismic shifts of international capital. If the world of human cultures is to be sustainable (and *sub specie aeternitatis*, this is a ludicrous assumption), it will be so, and only in the shorter term, under the geological conditions necessary to sustain a mass culture. Architects would do well to apply themselves to the pragmatics of working with the substance of reality at hand and in the present time, and avoid mythicising, proleptically, a paranoid and pessimistic ecology.

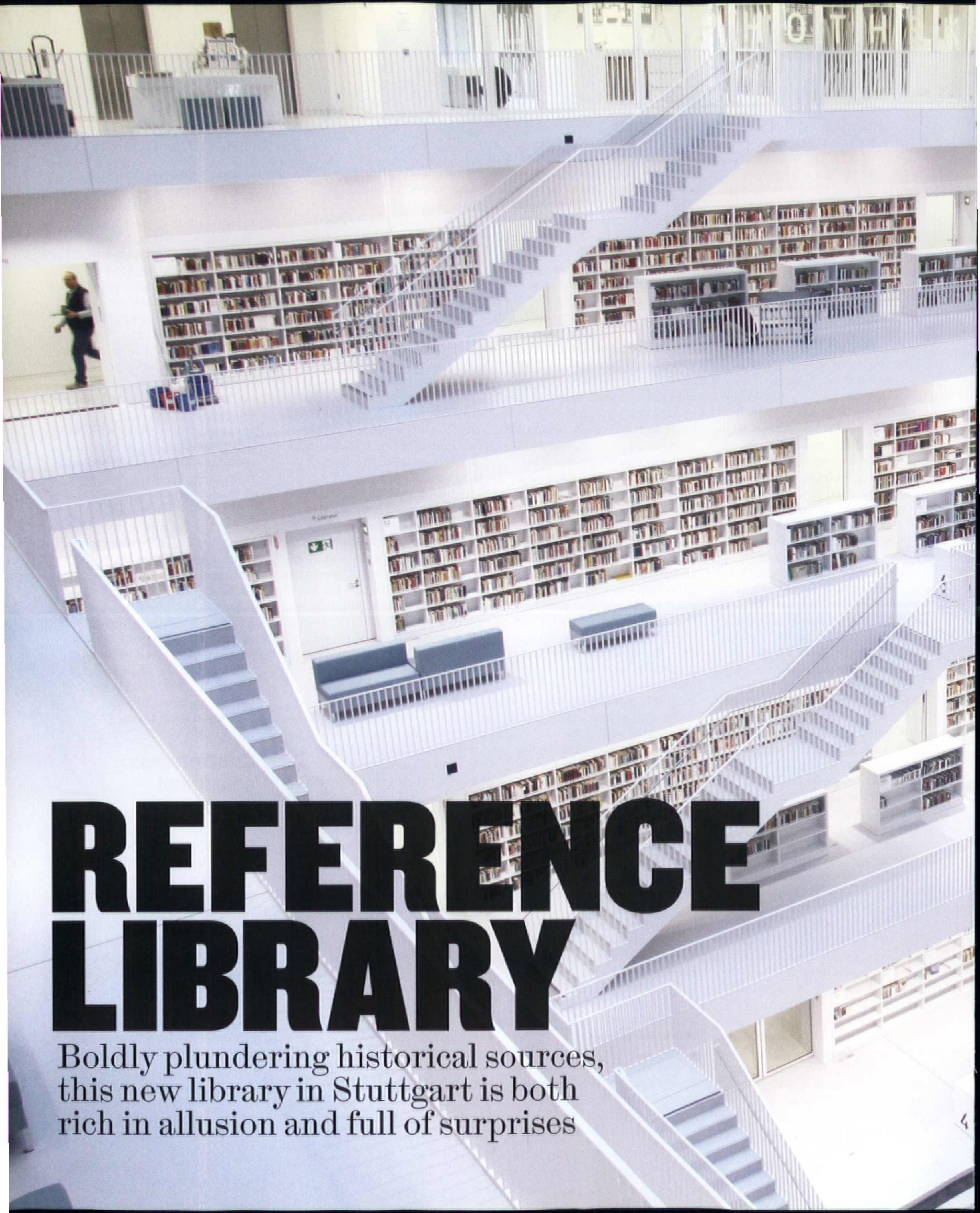
The world is not ending; it does not require you to save it; things are as they always were, in a structure which is eternally returning to the same. The paranoia of the 'all joined up' is yet another bluster from those who would seek to control everything, not by violence but by sentimentality. And while the princess and the prince discuss what is real and what is not, life outside goes on all around you.

**Kevin Rhowbotham, London**

## Contretemps concluded

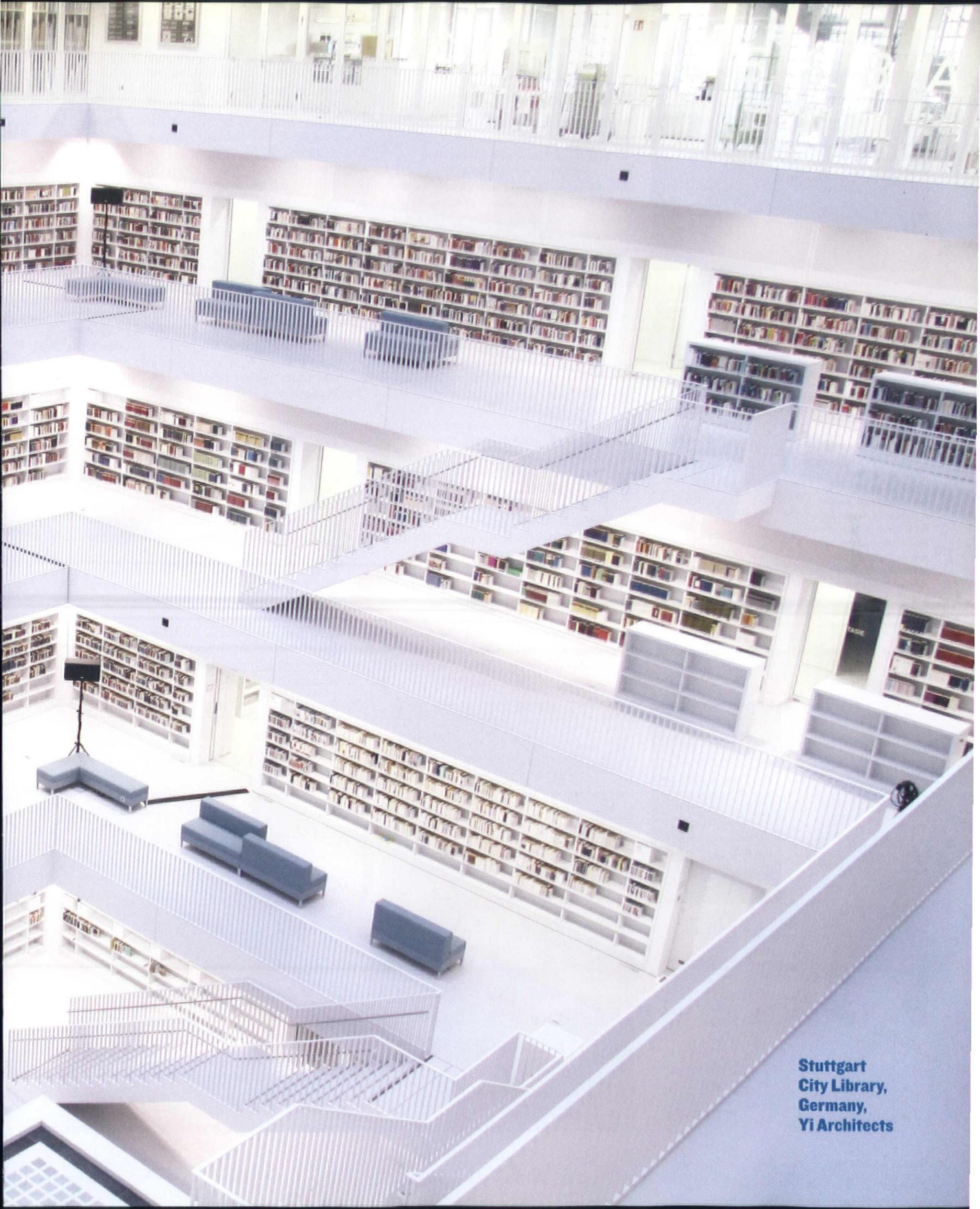
Jesus wept, what's this, Andrew Ayers, about social housing having a 'duty to be banal to a certain extent' (*Your Views*, February)? To what extent exactly? Most social housing is banal. And, matey, actually it shouldn't be. Look at the hugely interesting stuff for rich people which you can see on such terrific sites such as Materialicious and DesignBoom. Why do they have all the fun? No, what I thought I was saying was that there is such an enormous amount of banal architecture in the architectural pigpen that I was surprised to see AR not only printing it but making craven, monumentally fatuous comments about it.

**Joyce Malley, Sydney, by email**



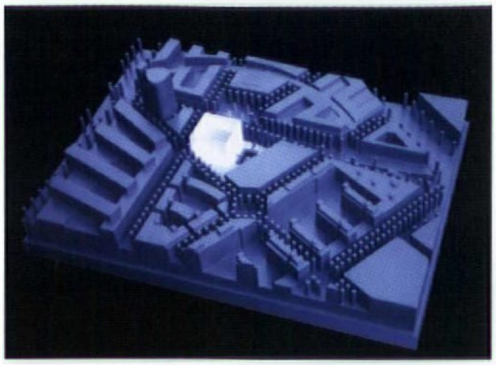
# REFERENCE LIBRARY

Boldly plundering historical sources, this new library in Stuttgart is both rich in allusion and full of surprises



Stuttgart City Library, Germany, Yi Architects

2



**1. (Previous page) the main reading room is an impressive five-storey volume, where the floor plates progressively step in; more private reading areas are provided around the periphery**
**2. The library is at the heart of Trojan + Neu's contentious masterplan**
**3 & 4. The architect has referenced the Pantheon and Boullée's Bibliothèque nationale de France**
**5 & 6. During the day the building appears as a crystalline white cube; whereas at night it sheds this mute appearance and glows bright blue**
**7. The library's nine-by-nine bay elevations possibly recall the Palazzo della Civiltà Italiana**

CRITICISM

**ORIEL PRIZEMAN**

The new Stuttgart City Library is contained within a perfect white(ish) cube placed directly to compass points, labelled in languages that address the four faces of the globe. Designed by Yi Architects, the building is a pantheon at the heart of a concentric plan, crowned by an inverted ziggurat reading room, iced with rotating photovoltaic roof panels and encased in a seamless nine-by-nine grid that emits blue light at night. Accompanied only by a 'pet' cube housing the air-conditioning plant, there is no other indication of an orienting hierarchy, of a possible front or back. Its drawings would fit well in the 1960s *Whole Earth Catalog*, the mind-expanding publication termed a precursor to Google by Steve Jobs. The scheme, won by the practice in competition in 1999, makes further explicit references not only to Boullée's 1785 visionary Bibliothèque nationale de France proposal, but also to Noah's Ark, Confucian theory of concentric order and the monolith at the heart of Stanley Kubrick's film *2001: A Space Odyssey* (1968).

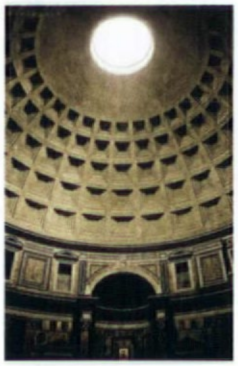
Set in the city that built the showcase Weißenhofsiedlung for the 1927 Deutscher Werkbund exhibition, the library leans on a pedigree of architectural polemic. Architect Eun Young Yi quotes Mies van der Rohe: 'What matters is not "what" but only "how".' But in this case, does the 'how' overwhelm the 'what'? Does the building's deafening conceptualism eclipse a more subtle tune in its potential to disseminate knowledge? Or, as its architect claims, can the architecture recede to act modestly as a 'host'?

Yi has responded energetically to an established appetite to deliver symbolism. He is not shy to cite timeless universal values nor to deal with the consequences of perfect symmetry. He states of Kubrick's film *2001: A Space Odyssey*: 'The basic question about the origin of civilisation and the standpoint of mankind has a lot in common with my work.' The library was charged with a brief of centredness as the culmination of a process of deduction over a 30-year period of urban decision-making that has become highly controversial. Stuttgart 21 began in the 1980s with an aim to reclaim 100 hectares of valuable land from railway sidings within the restrictive basin of the city's hilly topography. The plan aims to transform the railway from a terminus to a station and is conceived as a 'European quarter' connected physically and culturally to the rest of the continent by new high-speed rail links.

A library was proposed at the centre of the scheme in Trojan + Neu's winning plan in 1997. While the rationale of the surrounding masterplan has become a target of heated local and national protest, the library opened last October and is already functioning with a fabulously mechanised beating heart as a lending library from which you can borrow not only books but artworks also. Though, at present, it is approached more or less by gang-planks from two axes bridging the enormous new *tabula rasa* that is being prepared for development by yellow earth-moving machines.

While the reference to the monolith is clear, Yi does not mention what is to my mind the building's most obvious precedent: the nine-bay Palazzo della Civiltà Italiana,

3



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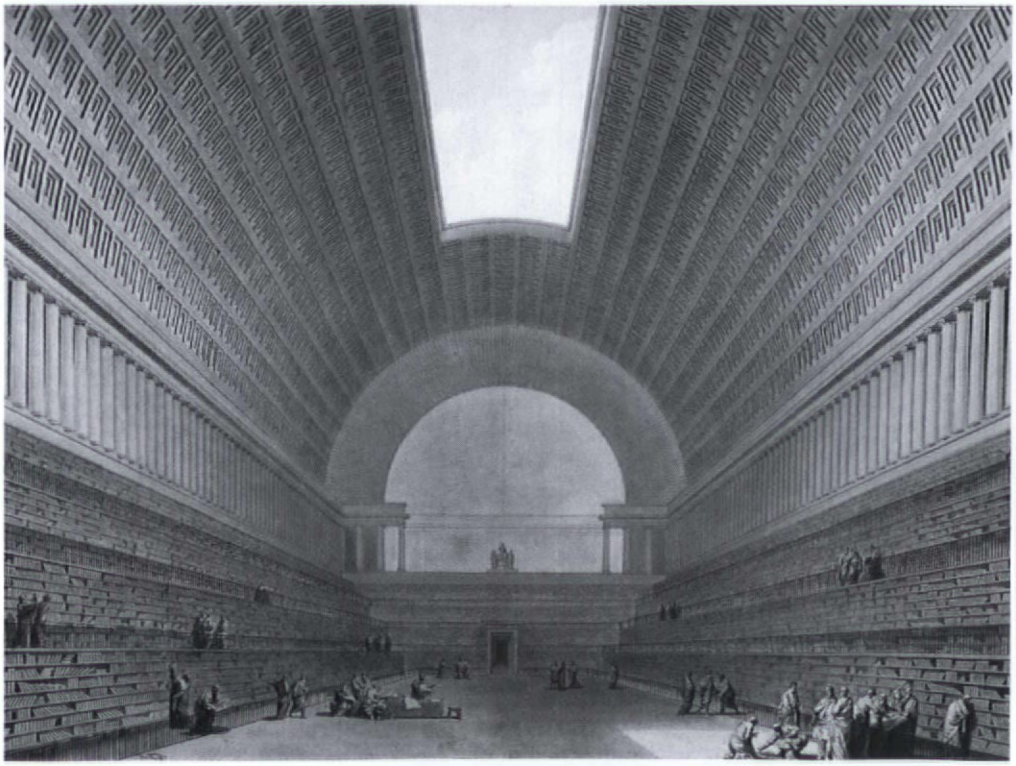

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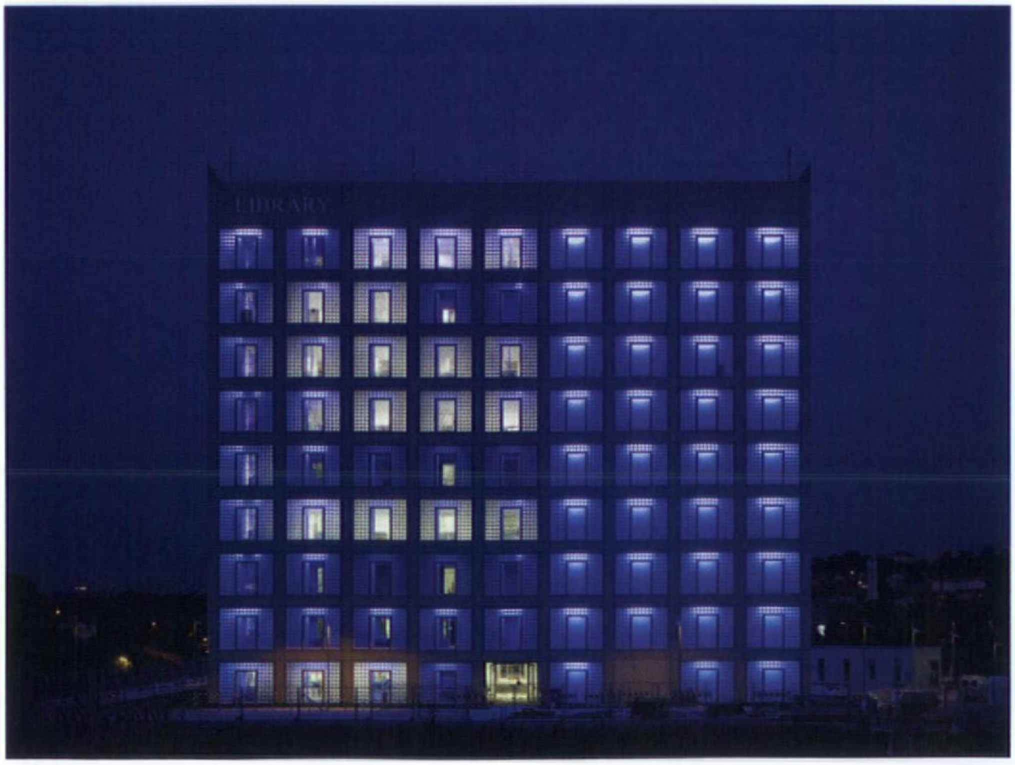

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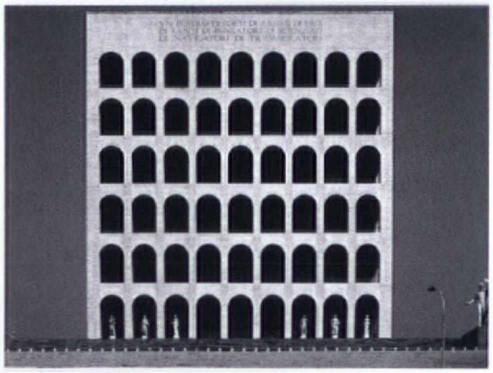
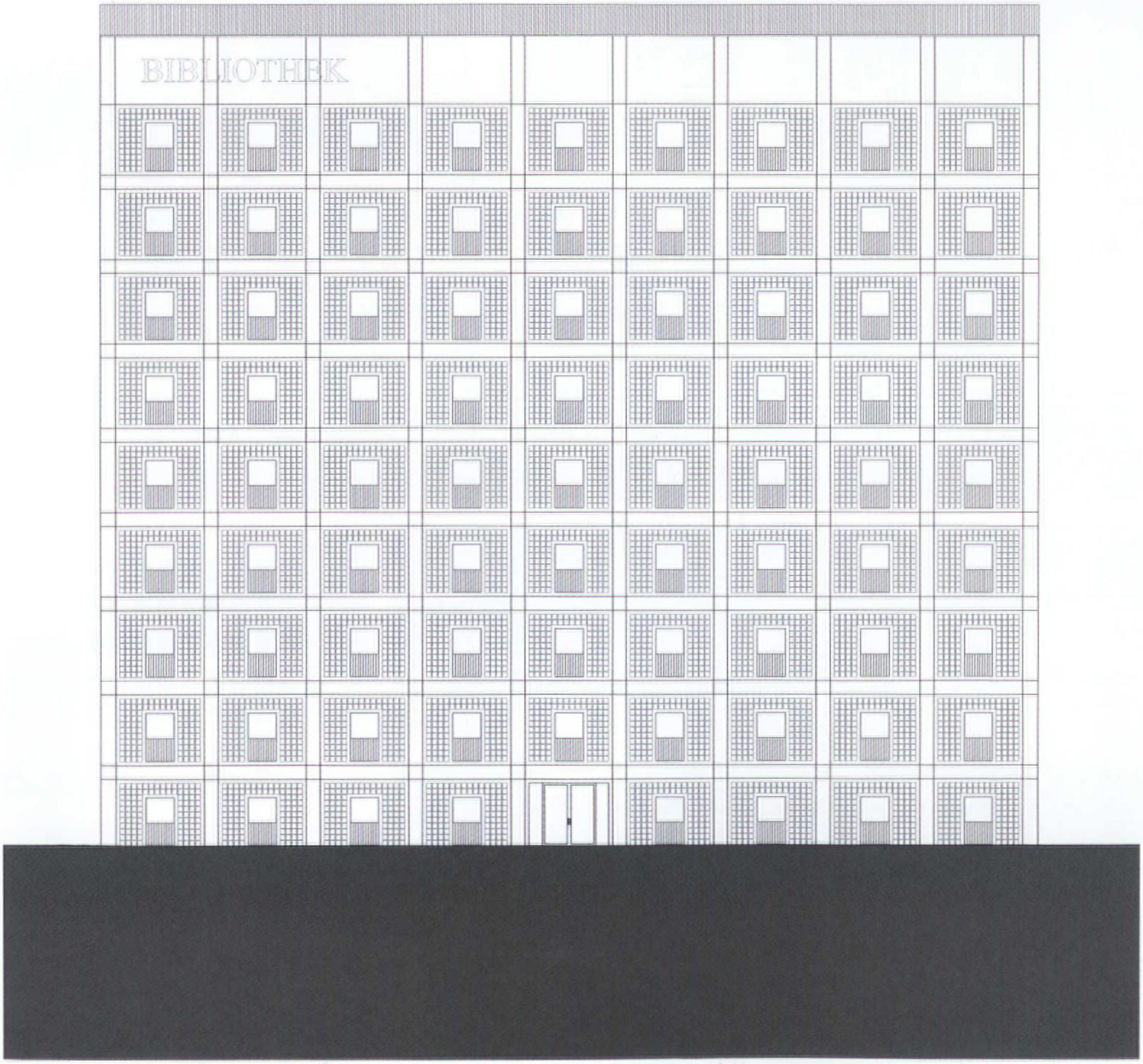
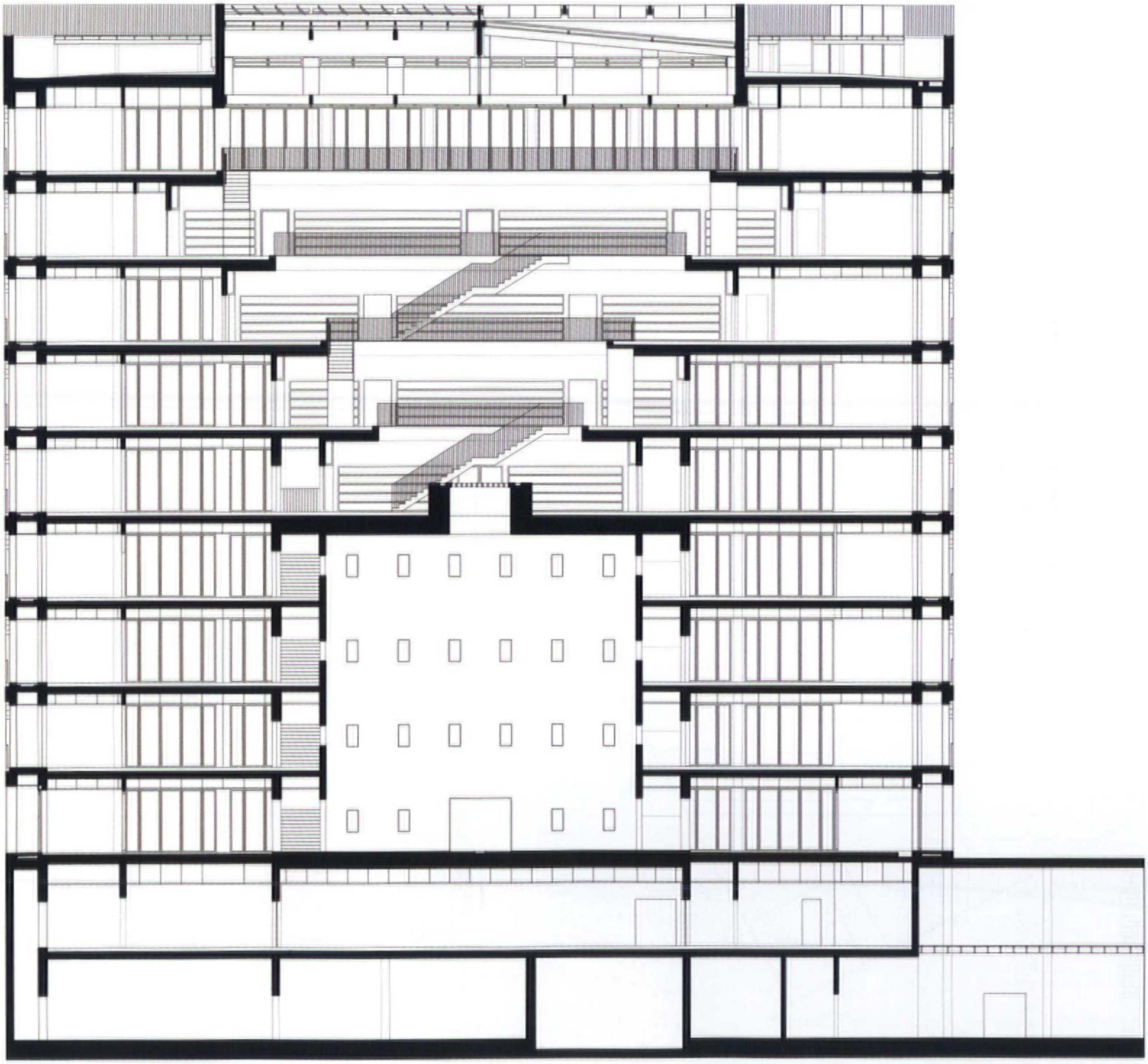


**Stuttgart City Library, Germany, Yi Architects**



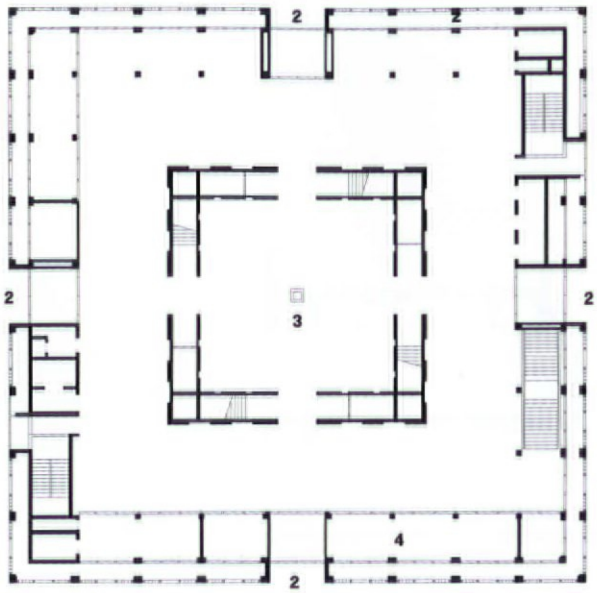
**indicative elevation**

**Stuttgart City Library, Germany, Yi Architects**

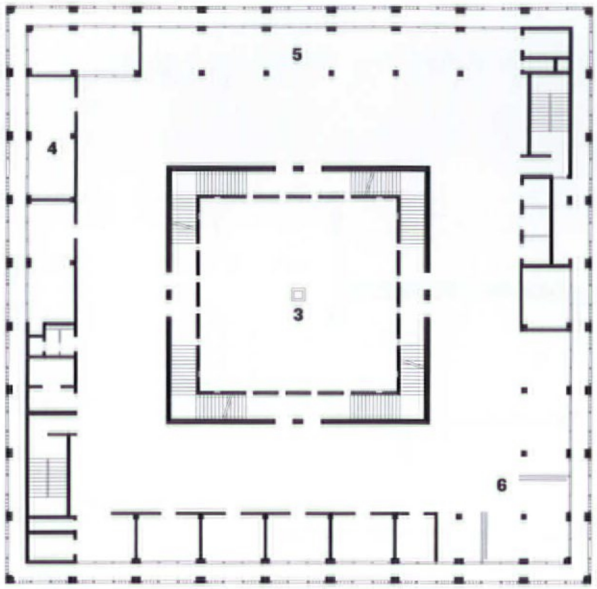


section

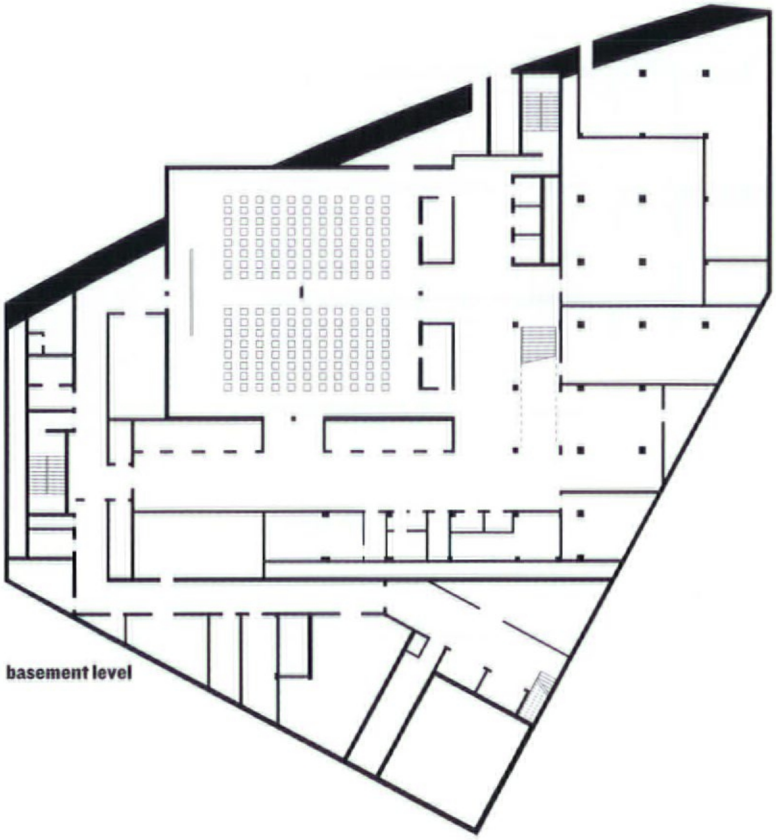
# Stuttgart City Library, Germany, Yi Architects



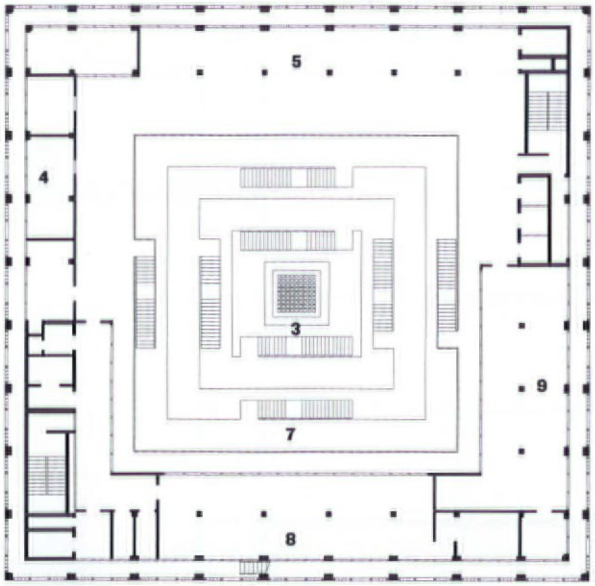
ground floor



first floor



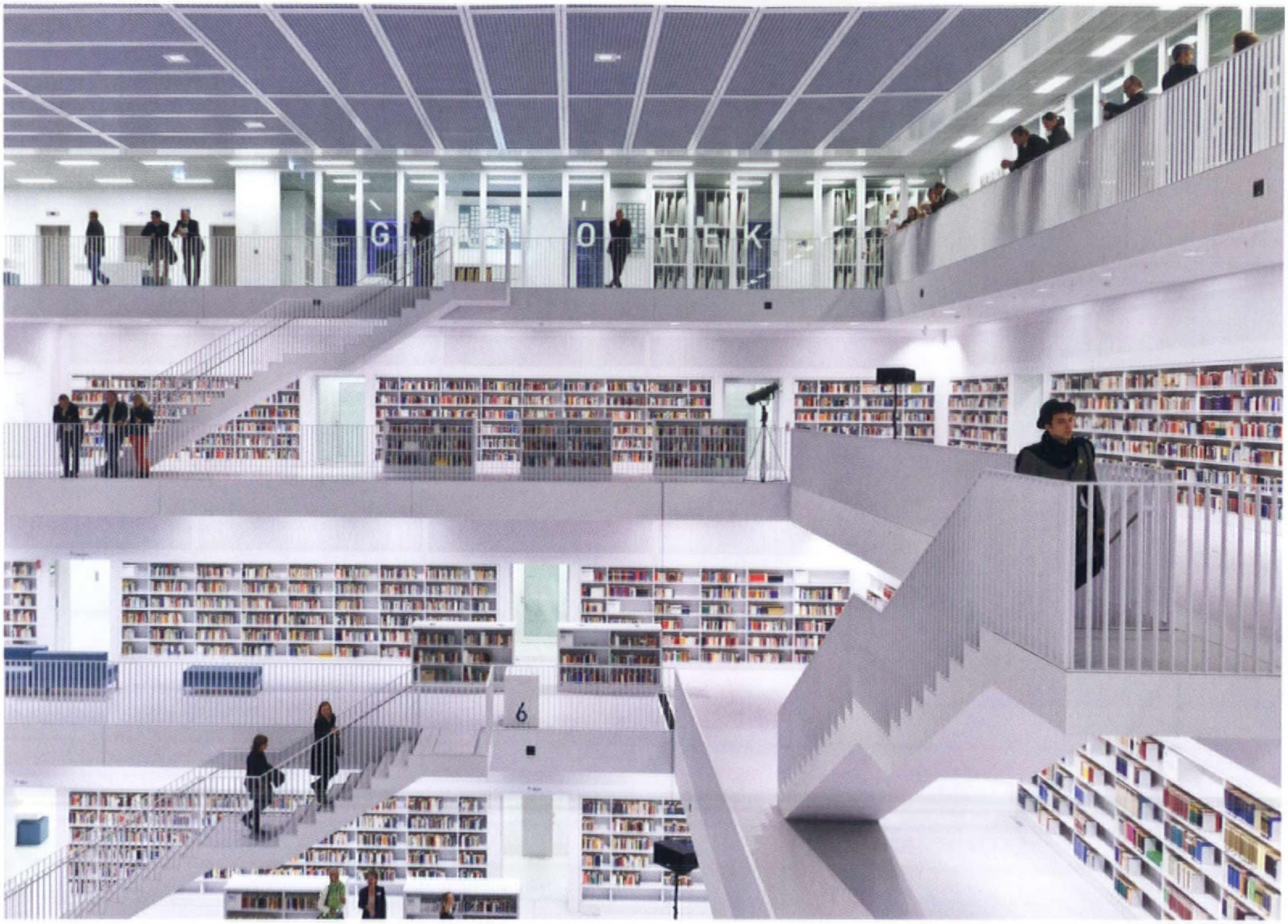
basement level



second floor

| | |
|---|---|
| 1 | auditorium |
| 2 | entrance |
| 3 | circulation space |
| 4 | offices |
| 5 | working area |
| 6 | group work area |
| 7 | reading area |
| 8 | café |
| 9 | picture library |

8



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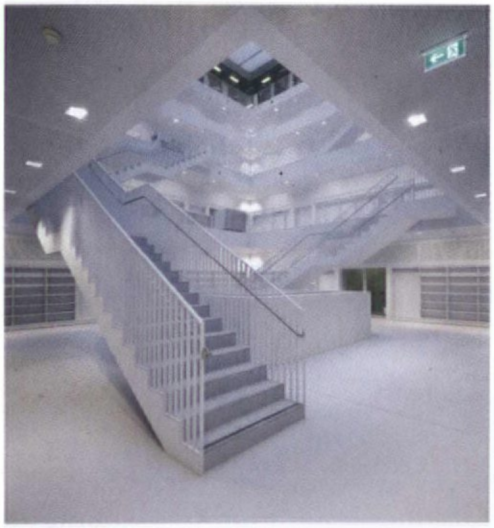


**8 & 9. Beyond the reading room's immediately dramatic appearance it takes a more recessive role as a 'host' with its seamless light-grey environment acting as a backdrop for the multi-coloured books**

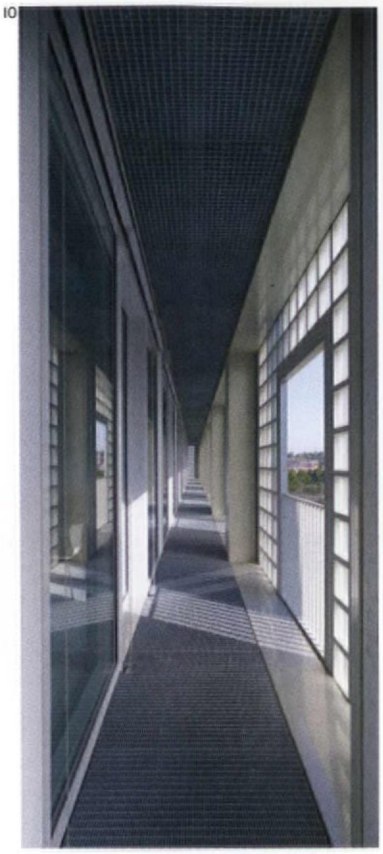
the Colosseo Quadrato designed by Guerrini, La Padula and Romano and built at the heart of Mussolini's Esposizione Universale Roma (EUR) between 1938 and 1943.

Undercutting a temptation to ridicule the bravado of the project is the delightful experience of encountering such an obsessively detailed and carefully executed building. (It was tempting to photograph 45m-high unerring lines of sealant just to show builders at home in Britain.) Approaching and entering through the translucent skin structure is a surprisingly animated experience. Like glimpsing the moving belts of a photocopier through its flatbed, the nine-storey delivery mechanism nakedly rotates obligingly and silently at the left-hand side of the west door, where a 24-hour book deposit hatch sits admirably flush to the surrounding wall.

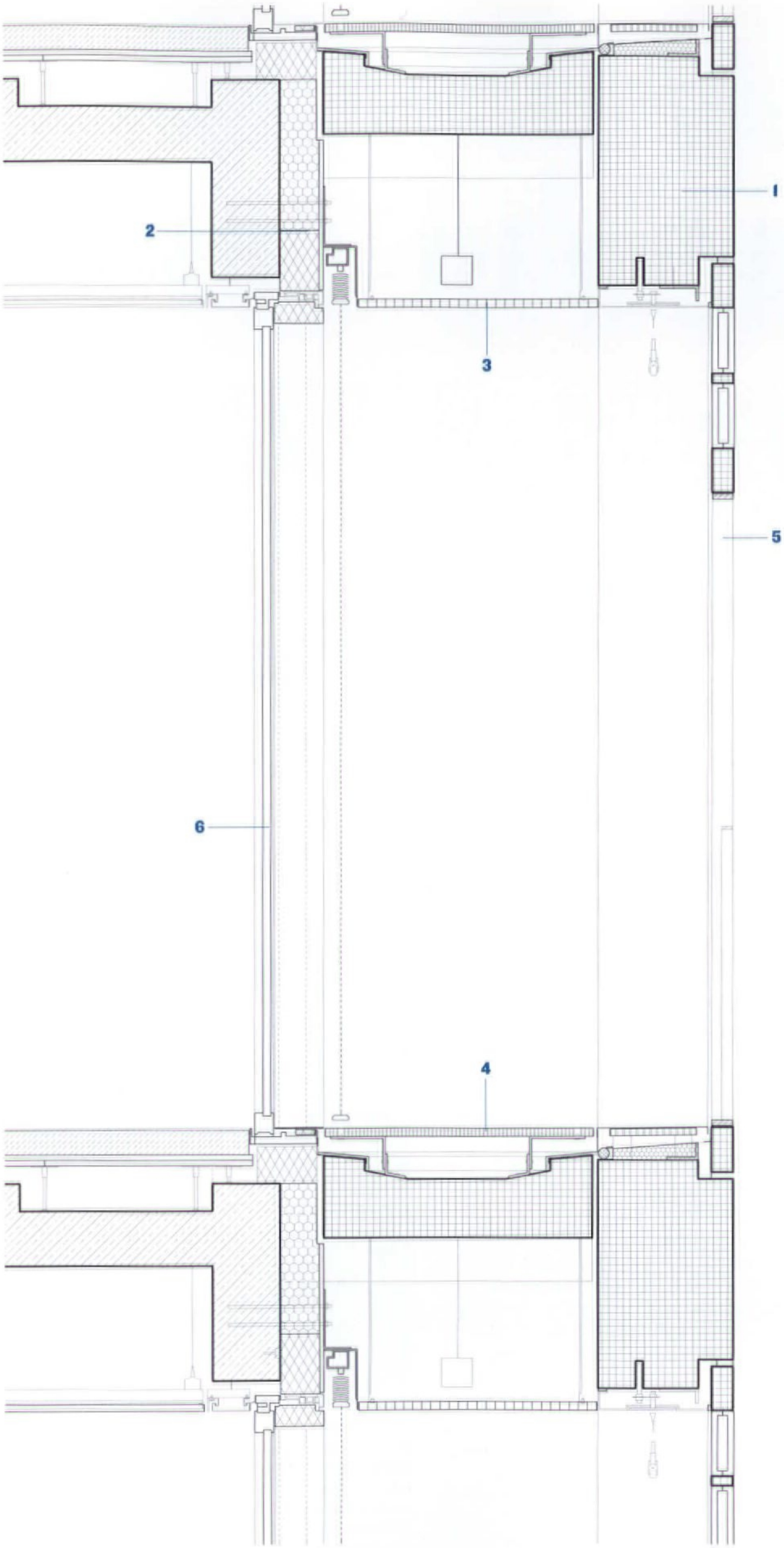
Being designed by a Cologne-based Korean architect and constructed in a manufacturing maelstrom, most doors slide rather than swing and do so perfectly. For British readers more used to entering a library being slapped in the face by a flatulent revolving door and a series of notices telling you why the public building you are about to enter is unsafe / about to close / slippery because someone has washed the floor / a place where you should not teach children to suck pens / smoke, the unimpeded ability to march straight into the building causes the mental timpani of Strauss/Kubrick to kick off at this point.

The ground-floor periphery, flanked by inset silent television screens, introduces the power and versatility of the all-pale-grey world of the interior, and demonstrates that facilities for reading newspapers and sitting at computers can be treated with the same material equanimity. The area encases the cubic pantheon at the centre. This four-storey $14m^3$ void is surmounted by a square oculus illuminated by natural light from the reading room above supplemented by blue LEDs. Directly beneath, a tiny square pool and fountain sit in the centre of the terrazzo floor. The walls (rendered in mineral plaster with no movement joints at all) and ceiling are perforated with rectangular and square niches and windows to resemble the Pantheon's coffers. Yet despite being designed to promote meditation, it also suggests social interaction with views across it from the stairwells.

10



- **1** thermally decoupled prefabricated exterior facade with supporting structure of solid reinforced concrete pillars and beams
- **2** thermally effective interior building shell; composite thermal insulation system with fine-grain, felted lime cement plaster
- **3** suspended ceiling of structured gratings
- **4** raised floor of structured gratings
- **5** translucent glass brick modules, opening with steel railing
- **6** post and mullion system of three sections with a sliding door



**detailed section through facade**

## Stuttgart City Library, Germany, Yi Architects

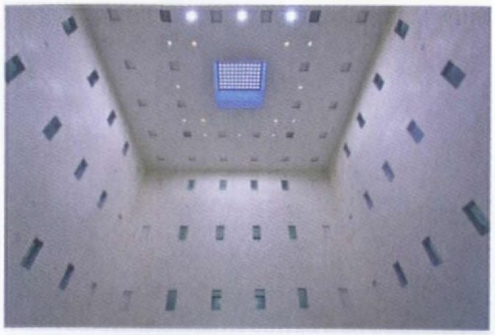
An inner skin containing a quadruple helix of stairs between walls is perhaps the craziest gesture of the building, providing what appears to be an endless potential for errant children to lose their parents and shout at strangers without being readily identified. The outlying spaces on each storey, coated in pale grey floors and furniture, are the same height, sheathed by sliding glass walls which open to give access to continuous promenades around the outside of the building.

The idea of a library acting as a new secular urban catalyst is far from new. However, Yi's creation of an anti-materialist inner sanctum within a public library presses the idea far further than its contemporaries. Diodorus described the 14th-century BC library of Ozymandias as 'the dispensary of the mind' that contained at its centre an inner chamber, a 'sacred library'. But there is a significant disjunction in so far as Yi's 'heart' does not actually contain any books. Whereas ancient libraries sought to enshrine texts as the most highly valued cultural currency and to limit access as a privilege, public libraries have later sought to reverse the architectural hierarchy by offering information to all. The spatial apportionment of the new library goes further and suggests that it is the wondering thoughts of the visitor rather than the literary content of the library that is most valued.

The outermost external skin, an immaculately doubly fair-faced concrete wall only 80mm thick, contains translucent glass blocks with open portals in each of the 320 bays. Based on the visual experience of timber-framed Korean buildings, translucent screens frame transparent picture views of the outside world. From the inside, these focused vignettes subdivide the scale of the overall to serve the individual like carrels can. They are a far cry from the conventional lack of imagination with which a curtain wall system is conceived. It is this unexpected sensitivity that reverses your preconceived suspicions. The children's library is a delight, composed of unfolded bookstack modules and makeshift reading spaces. The strangeness of the building begins to have charm in detail. The balustrades in the reading room, each subdivided and apparently modestly made from steel flats, have clearly had a significant amount of time invested in their design. The crisis of the 'eckkonflikt' (corner conflict) is deftly turned at the newels, the spiralling ceiling grids are resolved like a happy sudoku, the trolleys and trays within them in the café align with the width of the columns they rest against, and suddenly this crazy, arrogant, puffed-up building presses all the obsessive-compulsive buttons of staring-around-a-room-and-thinking-while-reading spectacularly.

The motto of the Deutscher Werkbund was 'Vom Sofakissen zum Städtebau' (from sofa cushions to city building). The library aptly delivers a progressive scaling of decisions from masterplans to handrails. Indeed the diagrammatic ambition and dematerialised detailing of the scheme are extraordinary and thus far, while clean and unblemished, wonderful to behold. People and multi-coloured book-bindings can be seen visually to animate an otherwise entirely pale grey field. If we are to accept that the architecture is merely a host as claimed, we must acknowledge it is a very eccentric, generous and entertaining one. But you really must remember to wipe your feet.

11



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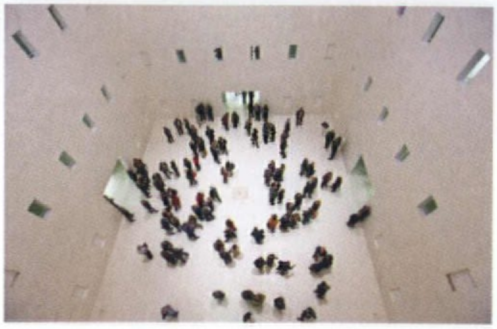

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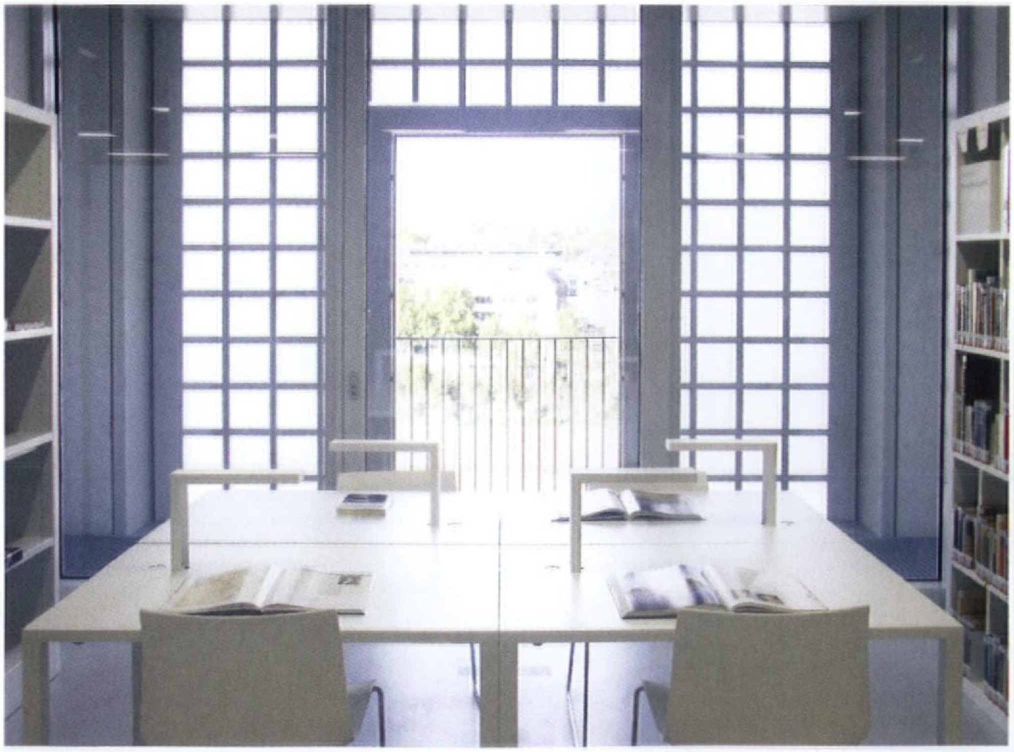
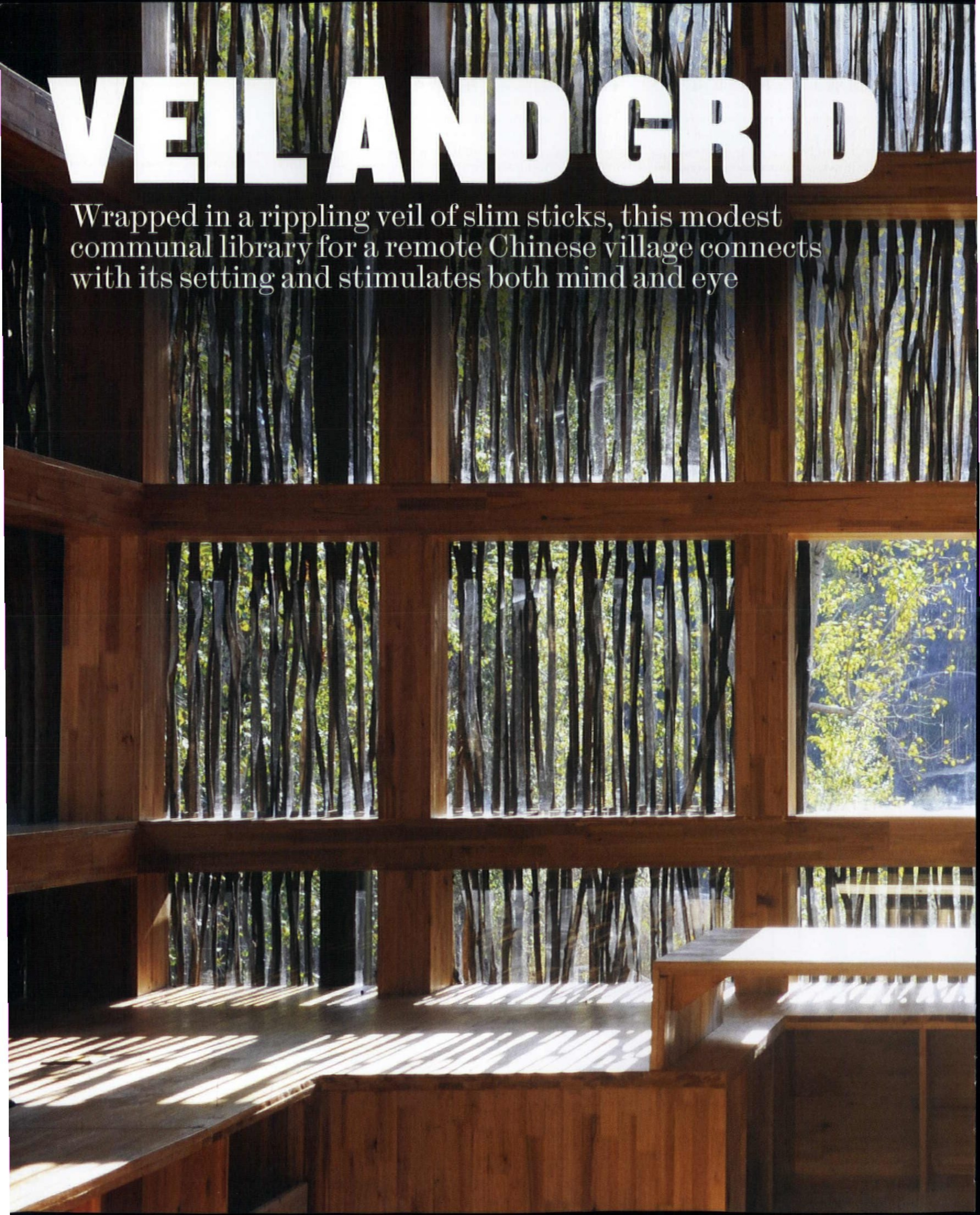


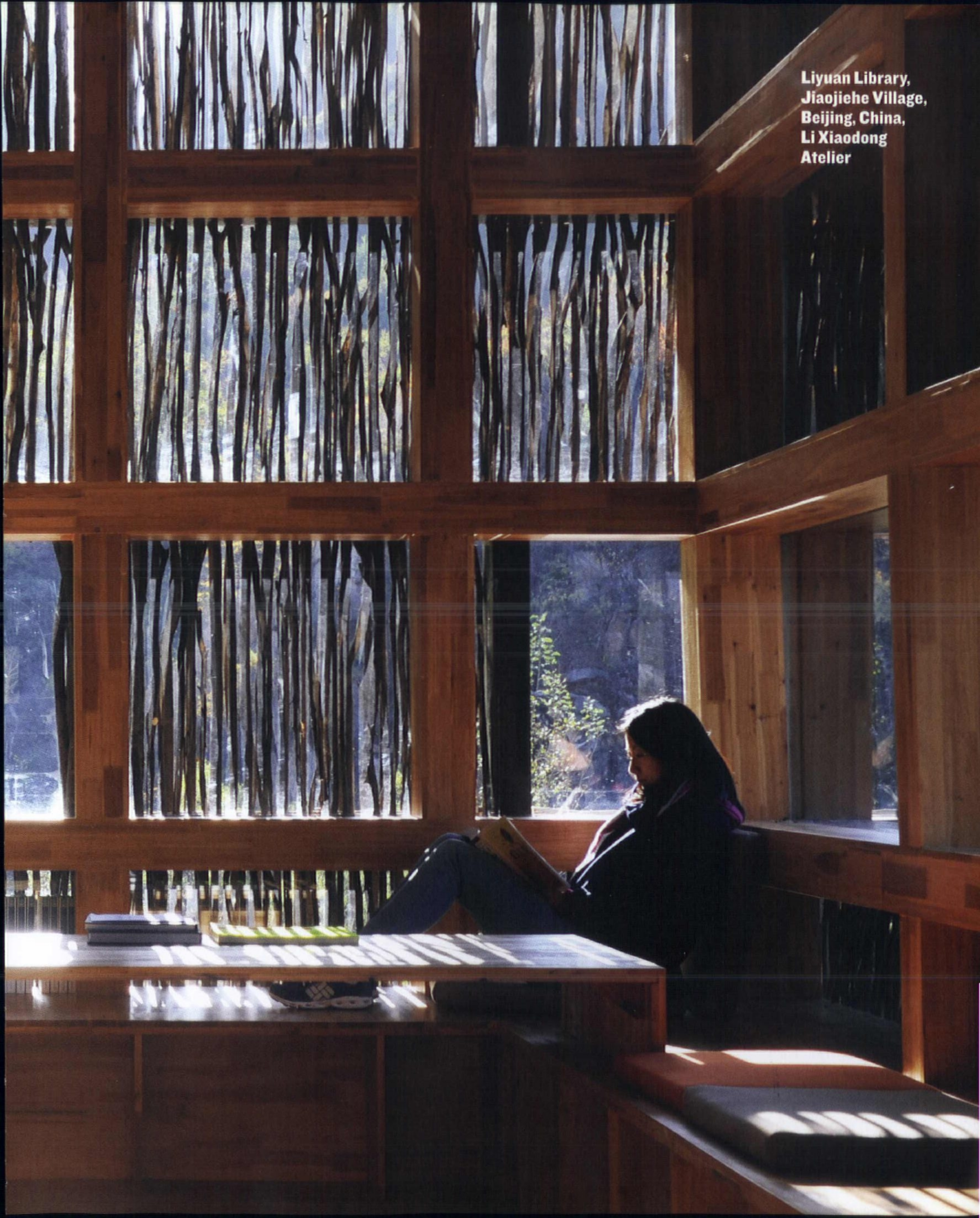
**10. Detail of facade**
**11 & 12. The central entrance volume is top-lit from an oculus in the reading room floor**
**13. A typical example of one of the quieter reading rooms, where a translucent wall shields readers from too much distraction from the outside world**

**Architect**
Yi Architects
**Structural engineer**
Boll & Partner
**Key consultants**
Drees & Sommer
**Photographs**
Stefan Müller

# VEIL AND GRID

Wrapped in a rippling veil of slim sticks, this modest communal library for a remote Chinese village connects with its setting and stimulates both mind and eye





Liyuan Library,
Jiaojiehe Village,
Beijing, China,
Li Xiaodong
Atelier

# Liyuan Library, Jiaojiehe Village, Beijing, China, Li Xiaodong Atelier

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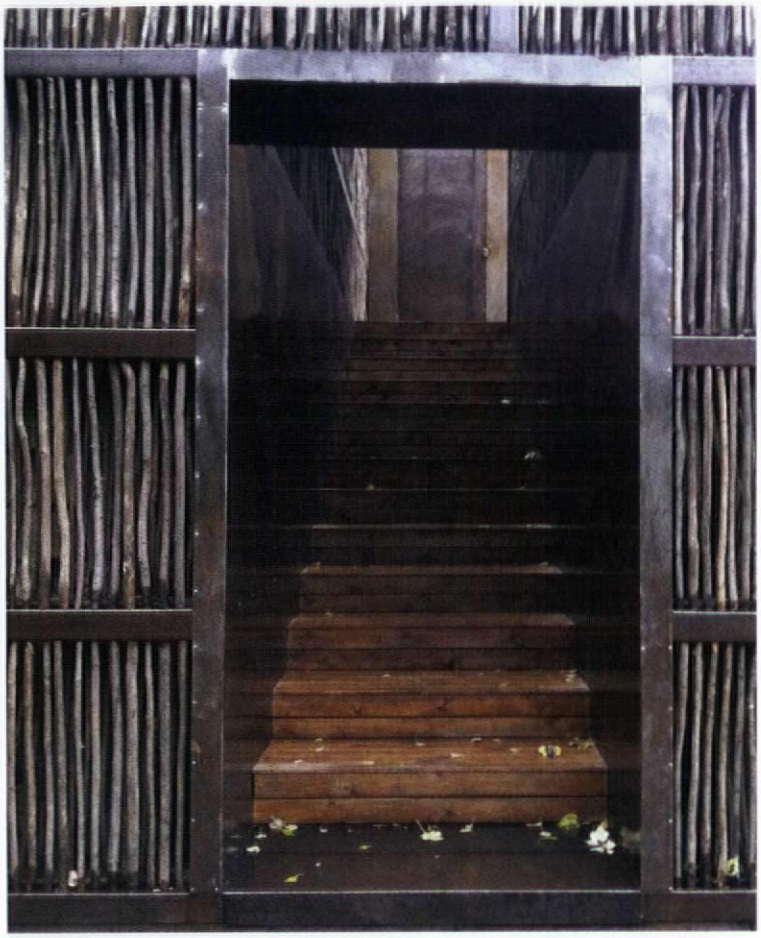

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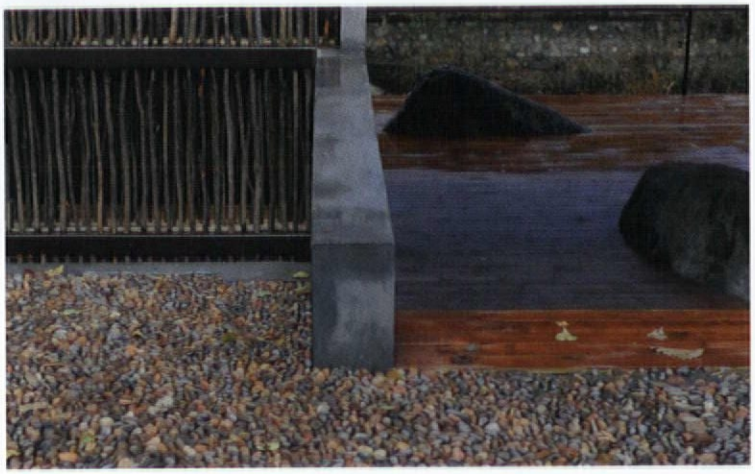


REPORT

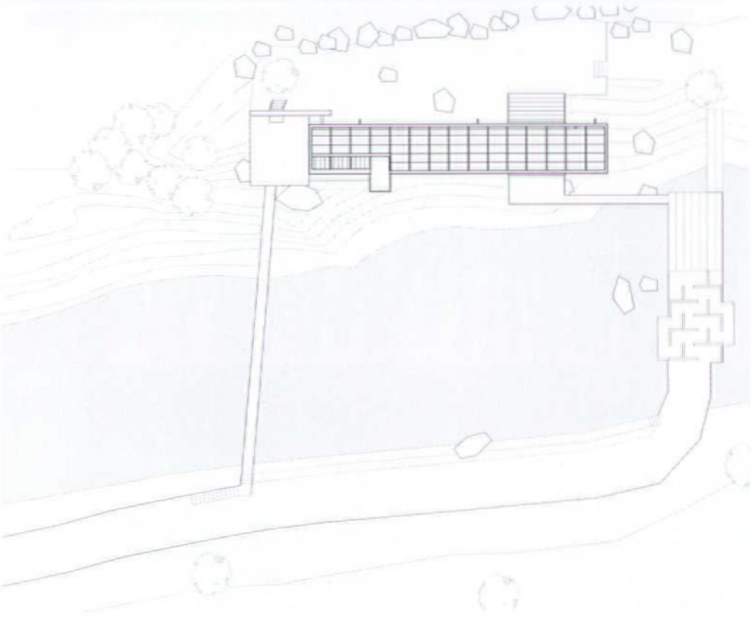
## CATHERINE SLESSOR

In China's recent dash for growth, it often seems that any acknowledgement of tradition or resonant connection with the past has been abruptly cauterised. Yet among an increasingly confident architectural profession, there are growing pockets of resistance to the mindless aping of Western models. Li Xiaodong is one of a younger generation of Chinese architects who are attempting to cultivate a more empathic engagement with the nuances of place and vernacular tradition, using these to inform an identifiably modern yet experientially rich and authentic Chinese architecture. 'Precedents of past experience and knowledge are important,' says Li. 'They provide a solid basis from which to solve new problems.'

Li has worked on China's social and geographic margins, exploring how local materials, technologies and archetypes can be synthesised into a memorable contemporary language. A school for the village of Xiashi, in remote Fujian Province, which in 2009 won the AR Emerging Architecture Award (AR December 2009), reinterpreted the traditional notion of an inhabited bridge that could be adapted to play a wider social role in village life.

Li's latest project is for a library in another village, Jiaojiehe, on the edge of the Beijing conurbation. Two hours' drive from the city centre, this rural idyll is a world away from the blare and dislocation of Beijing life. Set against an almost painterly tableau of river, forest and mountains, Li's deliberately unassuming building acknowledges that here, the manmade cannot compete with nature.

'We wanted to use architecture to enhance the appreciation of the natural landscape,' says Li. 'So instead of adding a new building to the village centre, we chose a particular site in the nearby mountains.' The site is only a short walk from the village, but this physical and psychological disconnection helps



**site plan**

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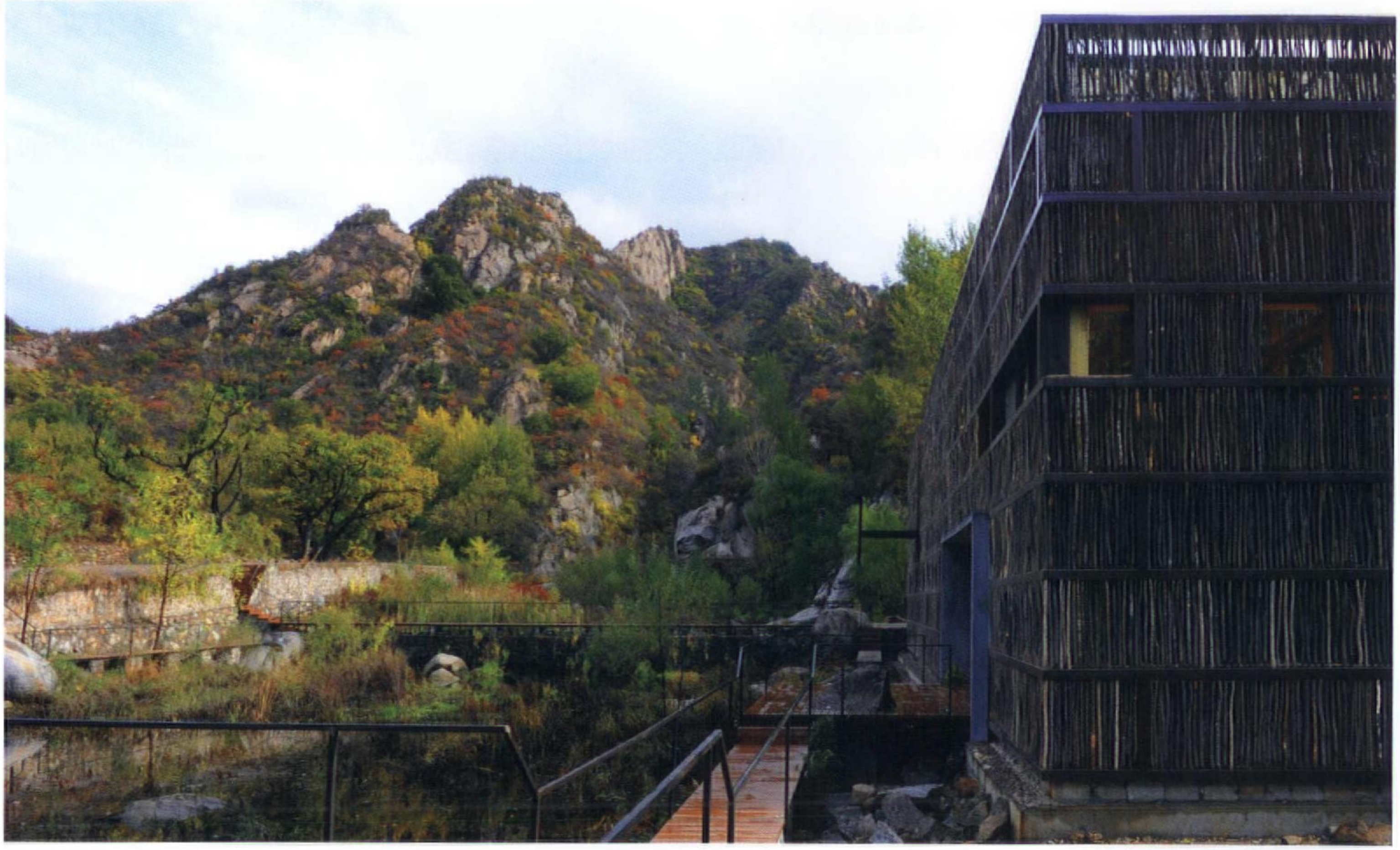

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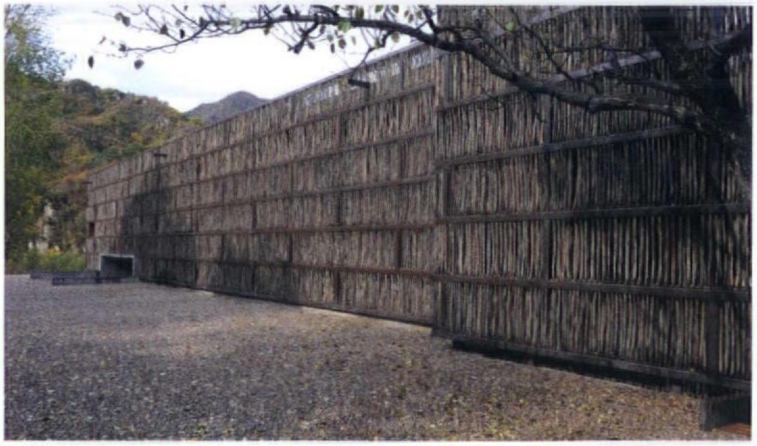

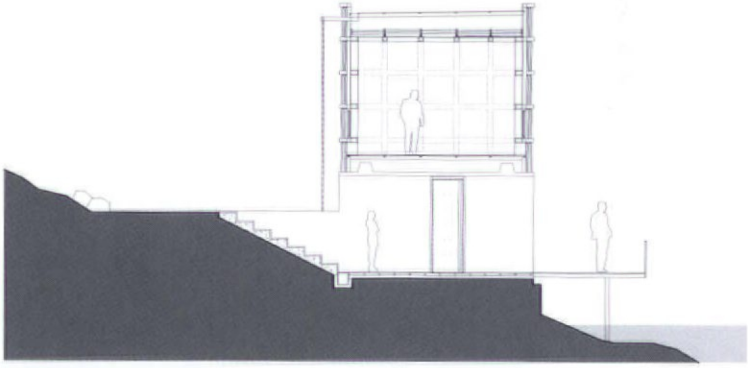

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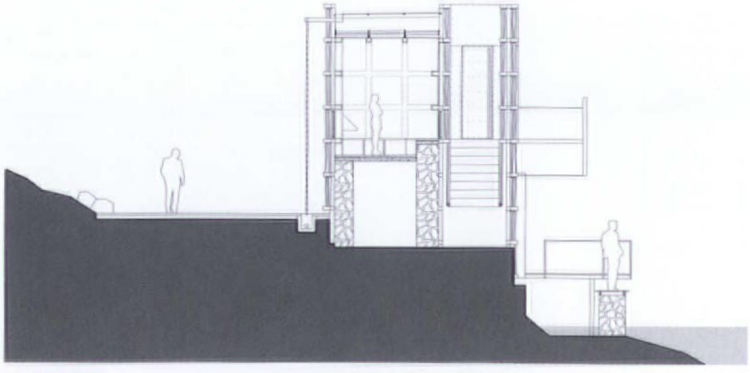
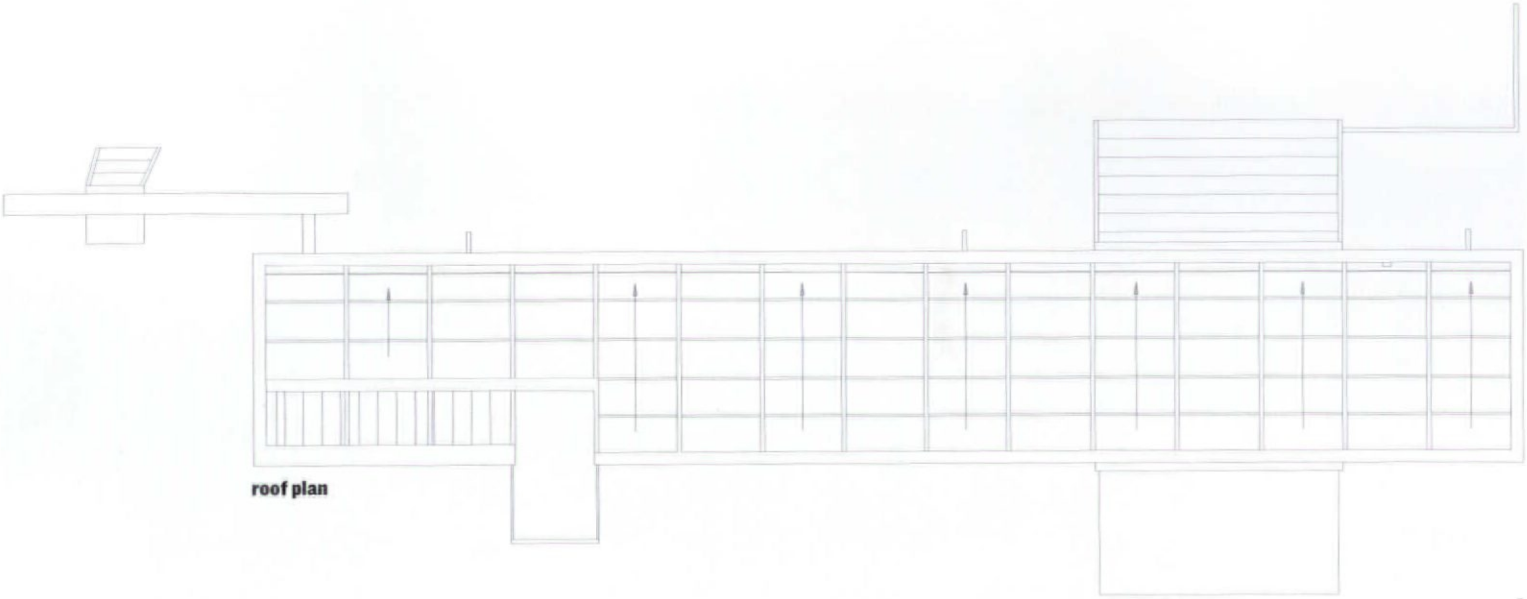


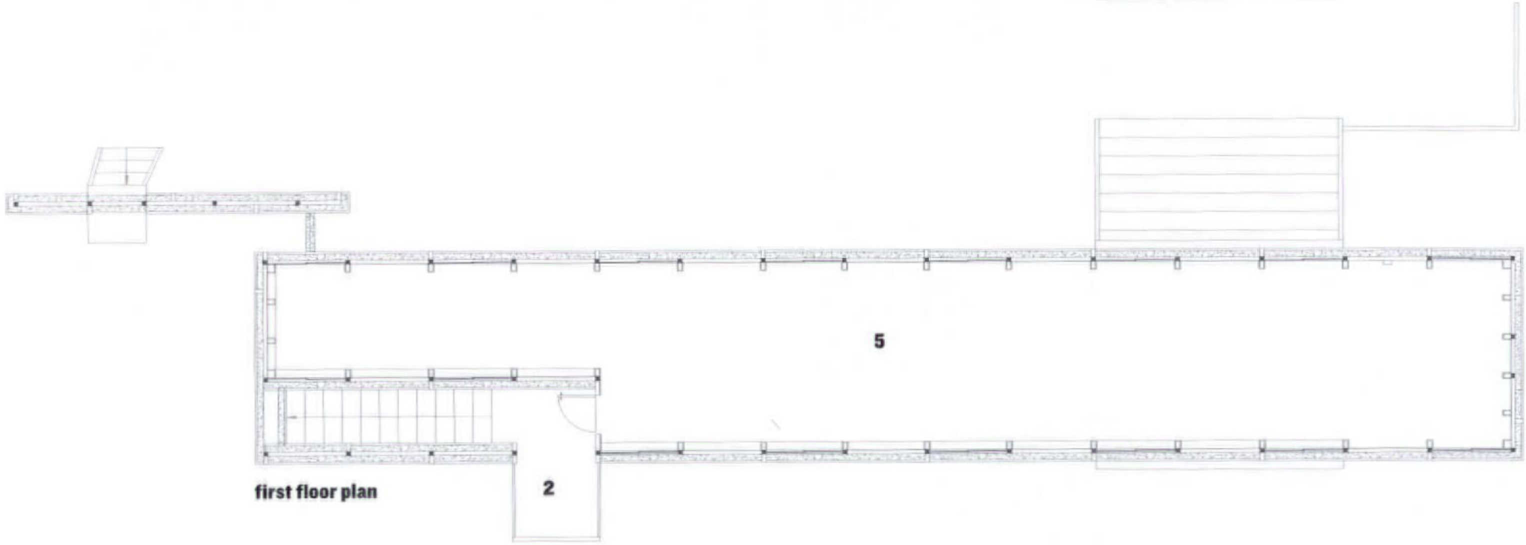
section BB

**1. (Previous page) light percolates through the rustic veil of wooden sticks, casting striated shadows around the library interior**
**2. Materials and textures fit together with sensuous finesse**
**3. Sticks that are more usually used as firewood were transformed into cladding**
**4. The sticks form a rainscreen layer around the building**
**5. Walkways connect the library with the riverside and wider landscape. The deliberately modest architecture defers to the grandeur of nature**
**6. Like fine, repetitive brushstrokes, the thin stick cladding sets up a hypnotic vertical rhythm across the facades**

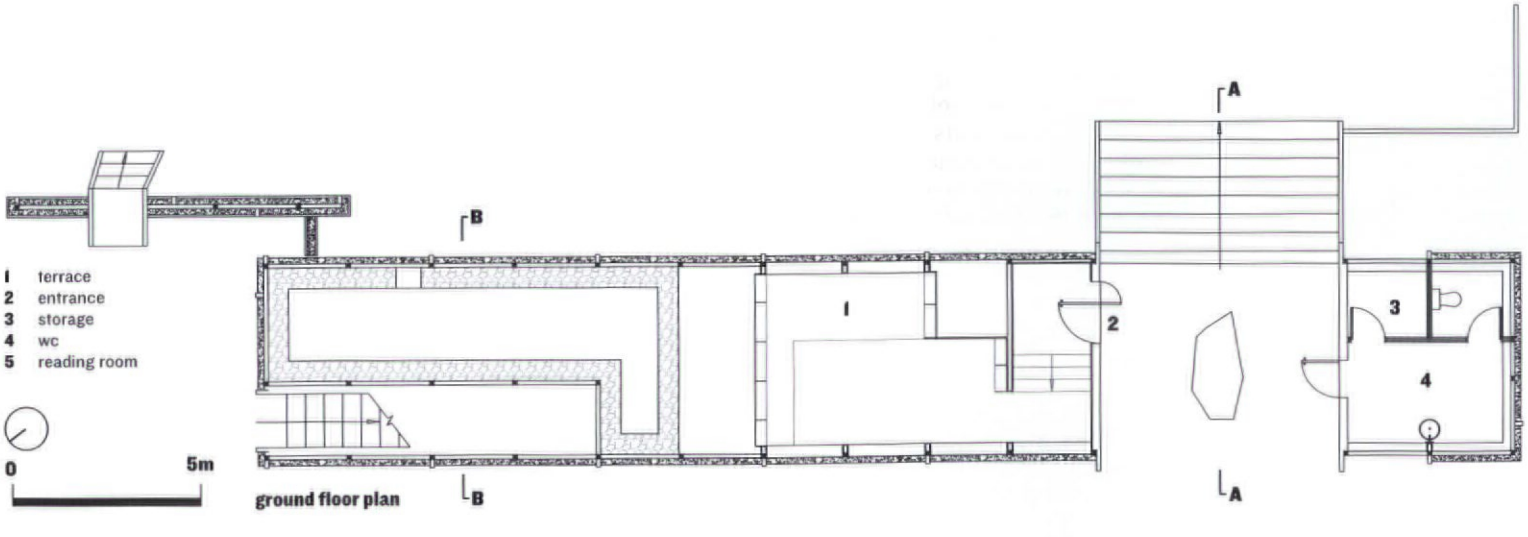
## Liyuan Library, Jiaojiehe Village, Beijing, China, Li Xiaodong Atelier



roof plan



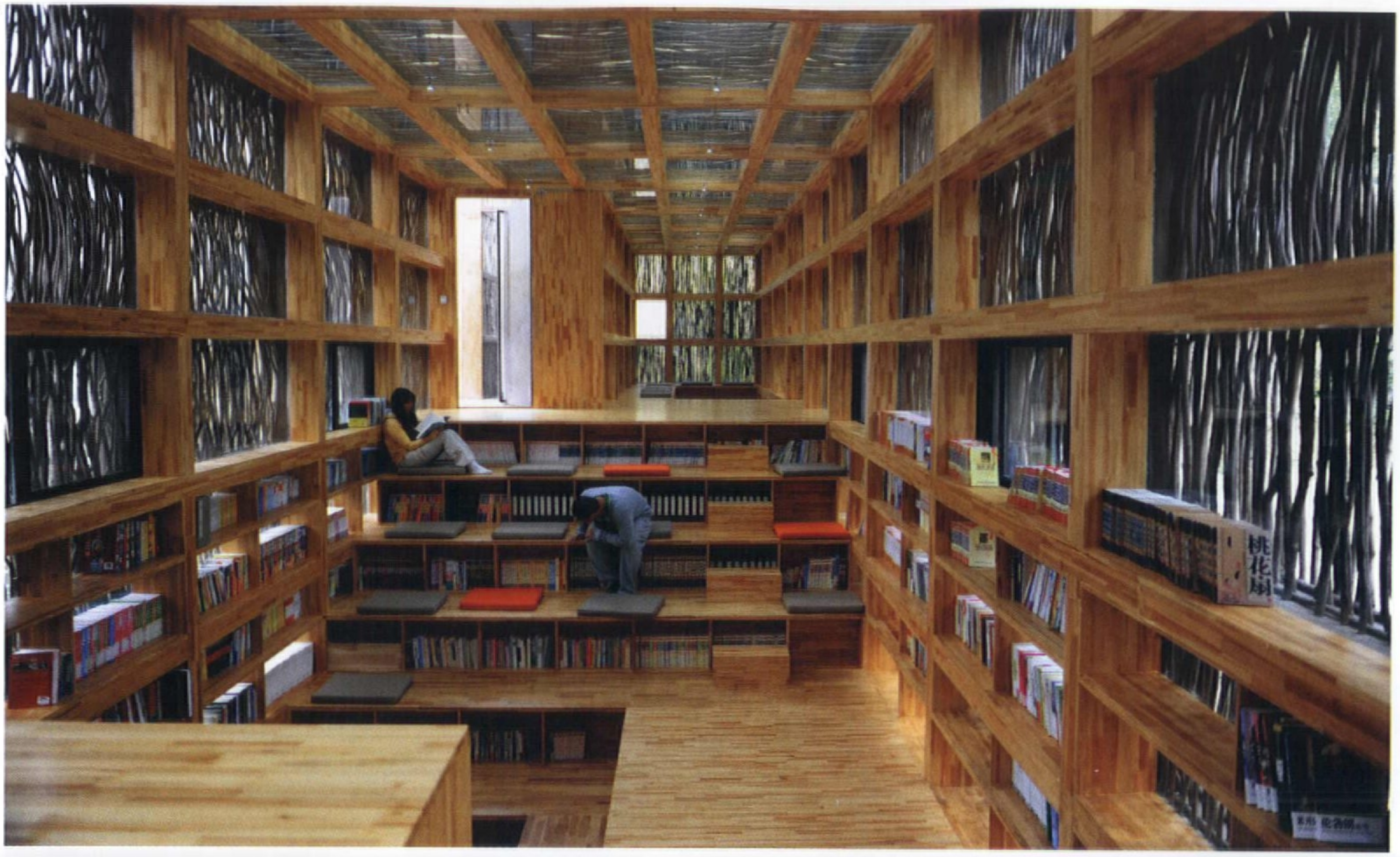
first floor plan



| | |
|---|---|
| 1 | terrace |
| 2 | entrance |
| 3 | storage |
| 4 | wc |
| 5 | reading room |

ground floor plan

7



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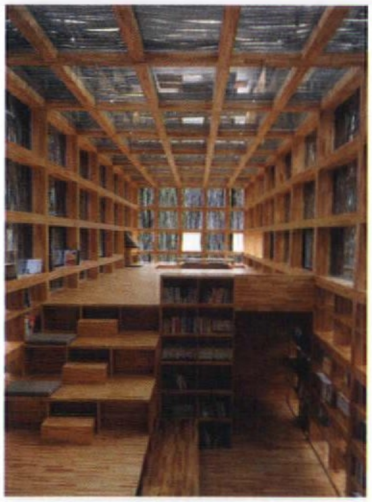


**7 & 8. Framed by the building's laminated timber structure, the library interior is an informal topography of steps, shelves and changes in level which readers can colonise as they please**

**Architect**
Li Xiaodong Atelier
**Project team**
Li Xiaodong
**Photographs**
Li Xiaodong

to conjure a sense of scholarly contemplation, in preparation for immersing yourself in books.

The long, low, two-storey volume is partly embedded into the riverside site. Along the water's edge, a series of narrow walkways and bridges link the library with the wider terrain, connecting with routes from the village and anchoring it in the landscape, as well as offering the potential for meditative strolls. Consideration of the relationship with landscape – how buildings sit in and interact with their surroundings, as well as the nature and placing of routes, paths and thresholds – has deep and complex roots in traditional Chinese architecture.

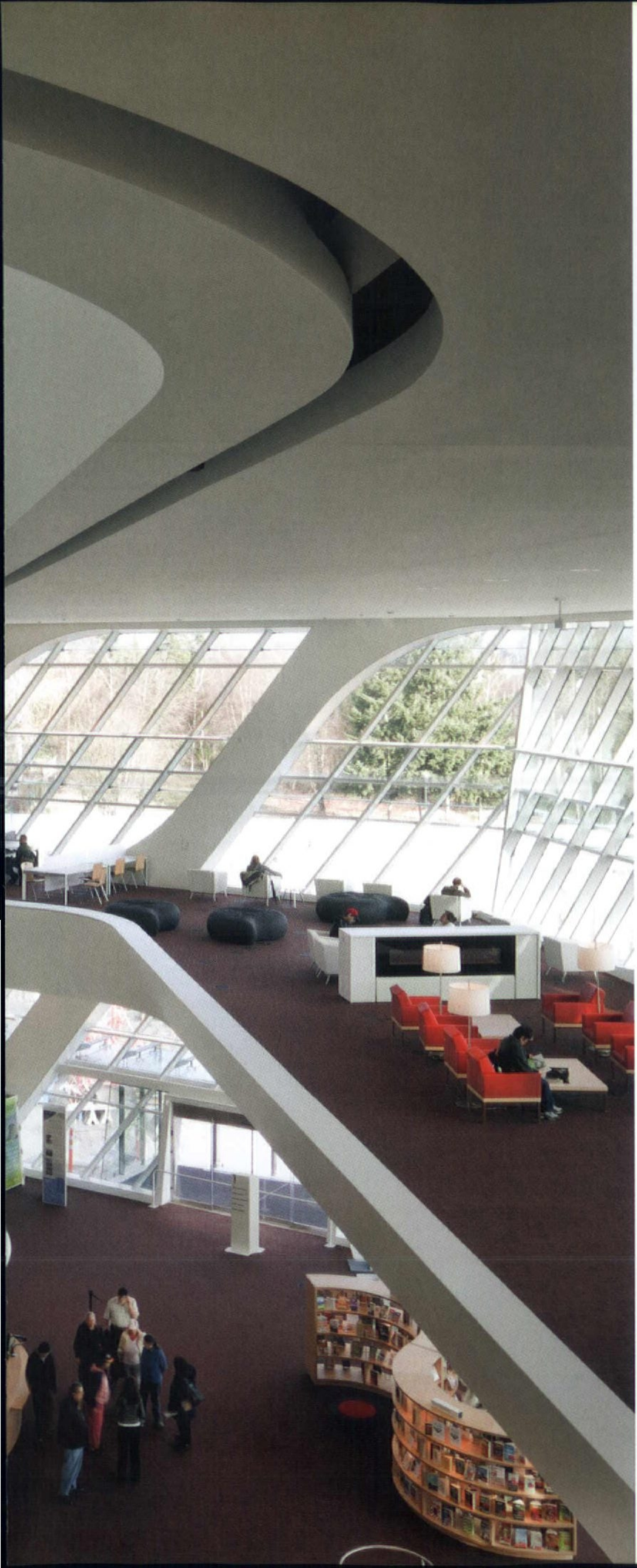
Wrapped in an outer layer of wooden sticks veiling an inner layer of glass, the building has an impermeable and slightly enigmatic countenance. From a distance, the neatly stacked effect of the sticks suggests that it might even be some kind of timber store, rather than a library. Walls and roof are identically constructed, the two layers of sticks and glass held together by a gridded, laminated timber structure. The thickness of the structure gives it a further use as shelving for books, so the grid becomes animated by the building's contents.

'From inside the effect is highly sensuous, with sunlight percolating through the fine timber veil'

The sticks are more usually gathered and used by locals as firewood to fuel their cooking stoves. Li noticed bundles piled outside each house and 'decided to use this ordinary material in an extraordinary way, cladding the building in familiar textures'. The harvested sticks were cut and trimmed to equal lengths and set vertically in the structural grid. Together they form a rustic rain screen or oriental *mashrabiya*, rooting the building more intimately in its rural setting, while also magically filtering and tempering the light.

From inside the effect is highly sensuous, with sunlight percolating through the fine timber veil, the thin sticks resembling fine ink brushstrokes dabbed across the glass skin. At certain points, the glass is left uncovered to frame particular views out to the external landscape. The building's interior is a topographic assemblage of steps and changes of level that define intimate enclaves for sitting and reading. Bookshelves are integrated within this topography, so the interior has a delightful informality, with patrons hunkering down on thin cushions to browse and read. Small terraces jutting out over the riverside offer the chance to break off from study and to admire the views.

It's all elementally simple; sticks, books, glass and light. Yet in its beautifully judged sobriety, Li's building shows what modern Chinese architecture could be, and how it resonates with the human need for introspection and connection with nature, stimulating mind and eye in equal measure.



# LIGHT READ

Daylight and books are often regarded as incompatible, but this Canadian library is a poetic and scientific sculpting of light that animates a dramatic interior

**Surrey City Centre Library, Metro Vancouver, Canada, Bing Thom Architects**

CRITICISM

TREVOR BODDY

Architects have come to view natural light as a generic commodity, not a precious animator of architectural form. One of the many unintended effects of this era of sustainability is to strip sunlight of the spiritual and synthesising qualities that it held for designers right up to the time of Le Corbusier and Louis Kahn, and instead to consider it as mere illuminating photons or trickles of electromagnetic energy, like power from a plug. Beginning with Saint-Denis, Abbot Suger's medieval doctrine of *lux continua*, the integration of light into public buildings has served symbolic as well as practical purposes, but lately it has been reduced to yet one more interchangeable item on energy management checklists.

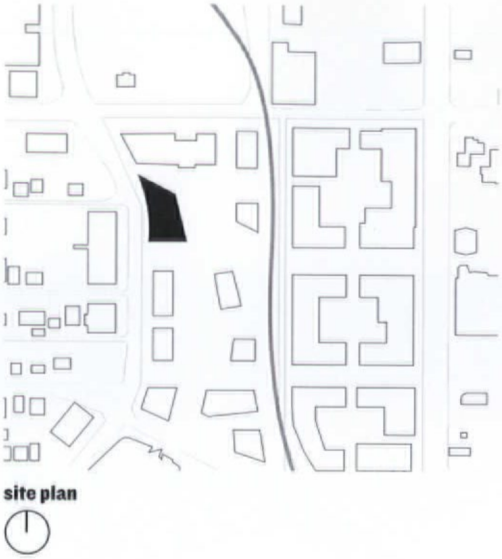
However, the ability of sunlight to partially heat buildings is – architecturally speaking – one of its least interesting qualities. Thanks to ray-casting three-dimensional computer programmes for design and rendering, architects have, ironically, never been better able to predict how their creations will respond to the arc of sunlight, but never at so much of a loss about just how to put light at the necessary centre of form-making. Day-lighting has been reduced to a dismal science.

To say that Bing Thom Architects' new central library for the Vancouver suburb of Surrey is obsessed with light is an understatement. This entire 7,600m² building is shaped around its day-lighting strategy, its curving walls, angled windows and vaulted skylights reaching upwards and outwards to pull in a surprisingly even cast of light to every corner and every one of its four floors. Ensuring that no portion of the stacks, reading rooms, classrooms or generous public spaces are without light through the seasons meant using a variety of techniques, enforcing the complex truth that fuller integration of daylight means using a range of light devices, no single techno-fix – another reason that many contemporary architects are not getting it right.

Glare and steep contrasts of lighting levels are to be avoided in libraries. A crucial strategy employed here was to admit very little direct sunlight into the CAD$26.5 million (£17 million) library – light here is bounced, buffered, diverted and diffused. According to Bing Thom, those few careful deployments of direct light in his design are like highlights of colour on top of a 'ground' of an impasto illumination: 'We found ways to paint with light.'

The most dramatic of these is the ringed skylight, an ovoid, doughnut oculus whose mullion patterns in light and shadow track daily across the central atrium, enlivening the space. There is an angled reflector around the north rim of the oculus ring, directing light back into reading areas, but only five per cent of the roof's area is open to the sky vault above, in order to minimise night-time energy loss in this temperate climate zone. These reflectors are fixed in place and there are

> 'Those few careful deployments of direct light in Bing Thom's design are like highlights of colour on top of a "ground" of an impasto illumination'



site plan

**Surrey City Centre Library, Metro Vancouver, Canada, Bing Thom Architects**

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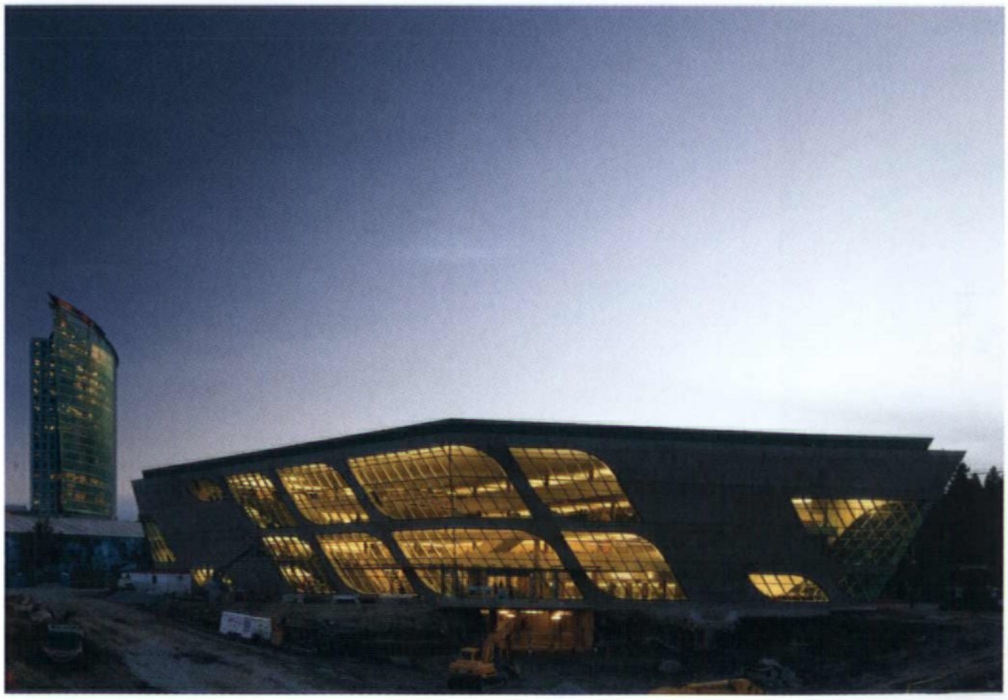
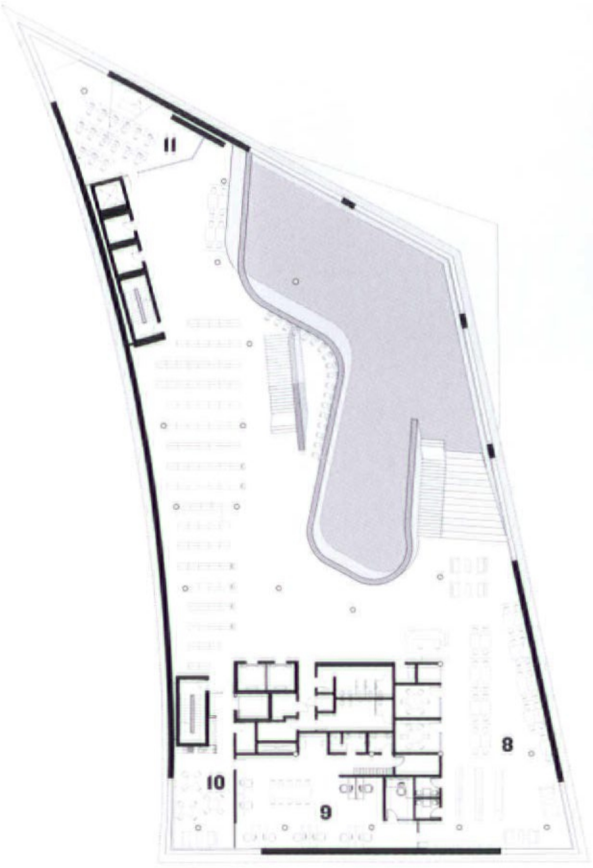
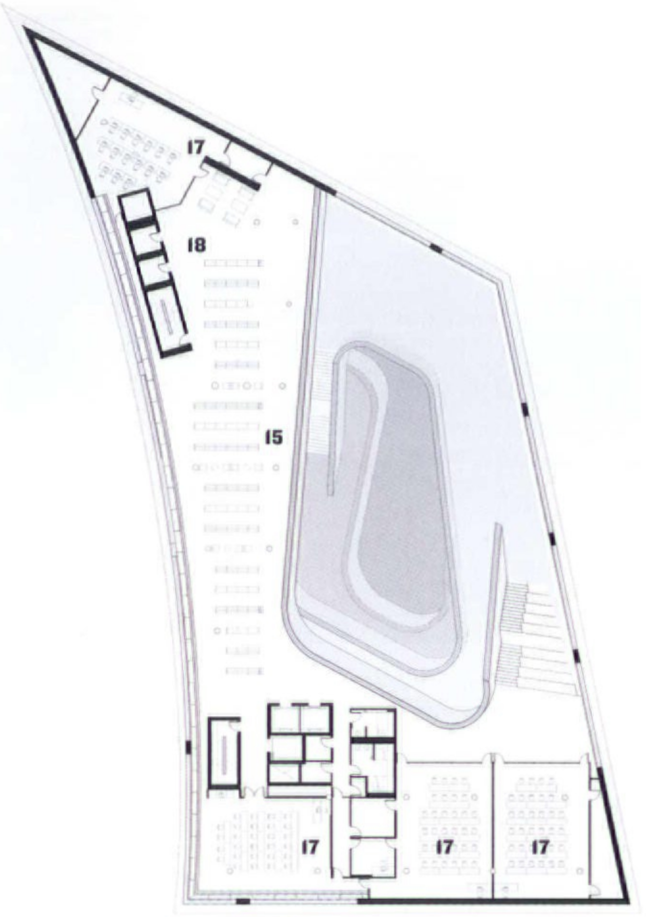


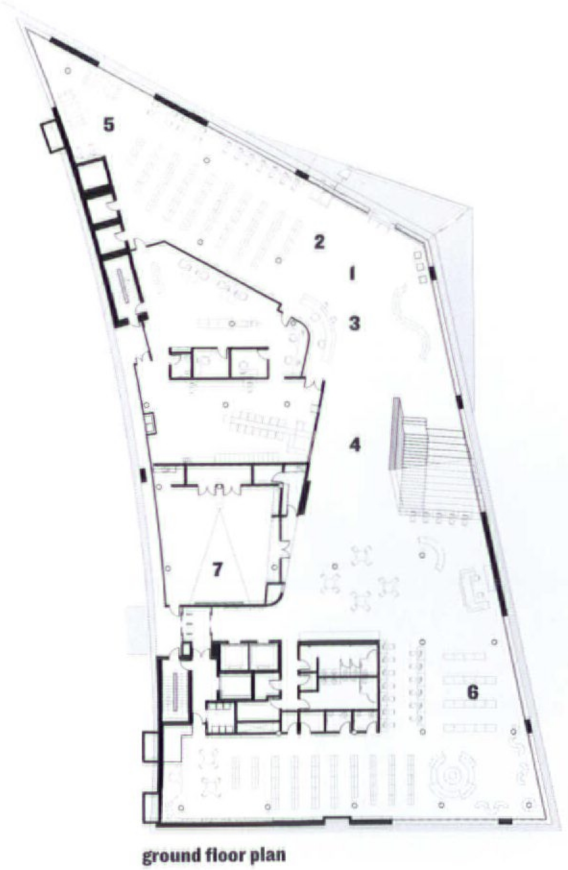
**1. (Previous page) the new library is imaginatively shaped around its day-lighting strategy. Natural light is diffused from a large oculus in the roof and bounced and buffered through soffits and angled balustrades into the interior**
**2. The building is a dynamic concrete and glass icebreaker slicing through the frozen banality of suburbia**



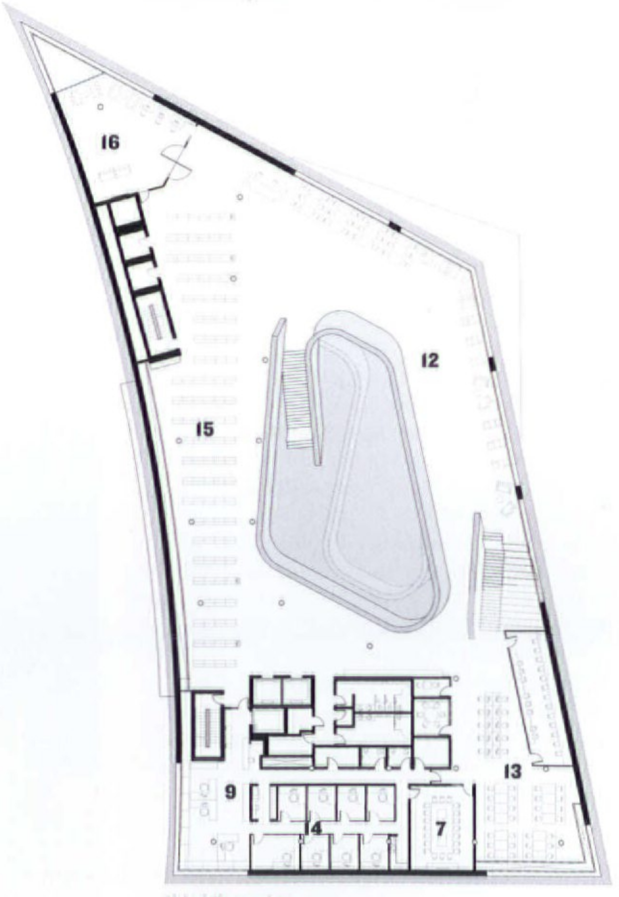
second floor plan



fourth floor plan



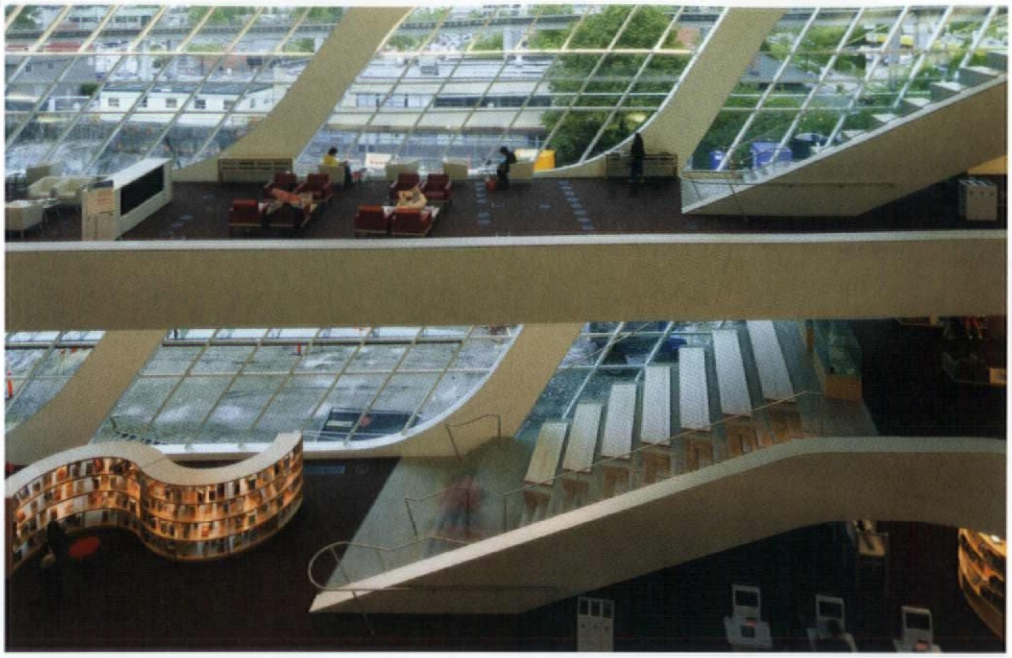
ground floor plan



third floor plan

| | |
|---|---|
| 1 | main entrance |
| 2 | book drop |
| 3 | information desk |
| 4 | lobby |
| 5 | outreach |
| 6 | children's area |
| 7 | multipurpose room |
| 8 | world languages |
| 9 | general workroom |
| 10 | staff lounge |
| 11 | literacy centre |
| 12 | living room |
| 13 | study carrels |
| 14 | offices |
| 15 | adult non-fiction |
| 16 | teen room |
| 17 | classroom |
| 18 | study area |

3



**3. Though only half the library's elevations are glazed, the building feels light and permeable, as glazing is deployed to maximum effect**
**4. Wide, angled balustrades help to channel light and also function as study tables. Despite the building's impressive scale, there is also a sense of scholarly intimacy**
**5. (Opposite) a monumental staircase links the floors. Natural light is remarkably even throughout the building, so only limited artificial illumination is required**

no adjustable enclosures for the skylights. The architect is sceptical about mechanical gizmos that 'always break down – whether [they are] irises at Jean Nouvel's L'Institute du Monde Arabe, or elsewhere'. Instead, he states flatly: 'I'm more interested in how building form itself passively tracks the light.'

A different device is used along the curving west elevation, which follows the alignment of University Avenue. At the fourth floor, the building's glass line is pulled back from its cast concrete exterior walls, with a linear skylight set along the floor level here and at the same location on the storey below to bring an even wash of light deep down along interior walls, transforming these areas largely devoted to open stacks. Thom credits the magnificent municipal libraries that he saw a few years ago in Medellín and Bogotá for this approach to the 'enlightenment' of publicly accessible book storage areas. The main reading rooms are set along the large windows lining the east elevation, allowing morning heating and views to the new Surrey City Hall and civic plaza, currently under construction. For energy conservation reasons only a net 50 per cent of the library's elevation areas are glazed, but strategically deployed for maximum effect – 80 per cent glass in walls oriented east (with its plaza view and desired morning heating potentials), but only 20 per cent on the west (with its late-day glare and unwanted afternoon-heating problems).

Functional and visually graceful architectural elements aiding day-lighting are the massive angled balustrades running around the atrium and up the monumental stairs. Painted in a flat white, the balustrades' sides are set at such an incline as to maximise the diffusion of light from the windows and skylights, with their tops made extra wide to serve as horizontal light shelves. There is a remarkably even cast of natural light all day in the library, requiring only occasional supplementary ceiling lamps. What Bing Thom Architects has achieved here with light might best be thought of in acoustical terms – finding a balance between liveliness and resonance in illumination. In those areas where the angled balustrades are set inwards to the active floors, carrels are built directly into them, with library patrons parked there and enjoying a splendid oversight of the entire building.

But it must be said this quality of light is achieved by very generous floor-to-floor heights and a large atrium – the net-to-gross ratio of usable spaces for the building is fairly low, and seating there has been packed since its opening last September. Post-occupancy,

**Surrey City Centre Library, Metro Vancouver, Canada, Bing Thom Architects**

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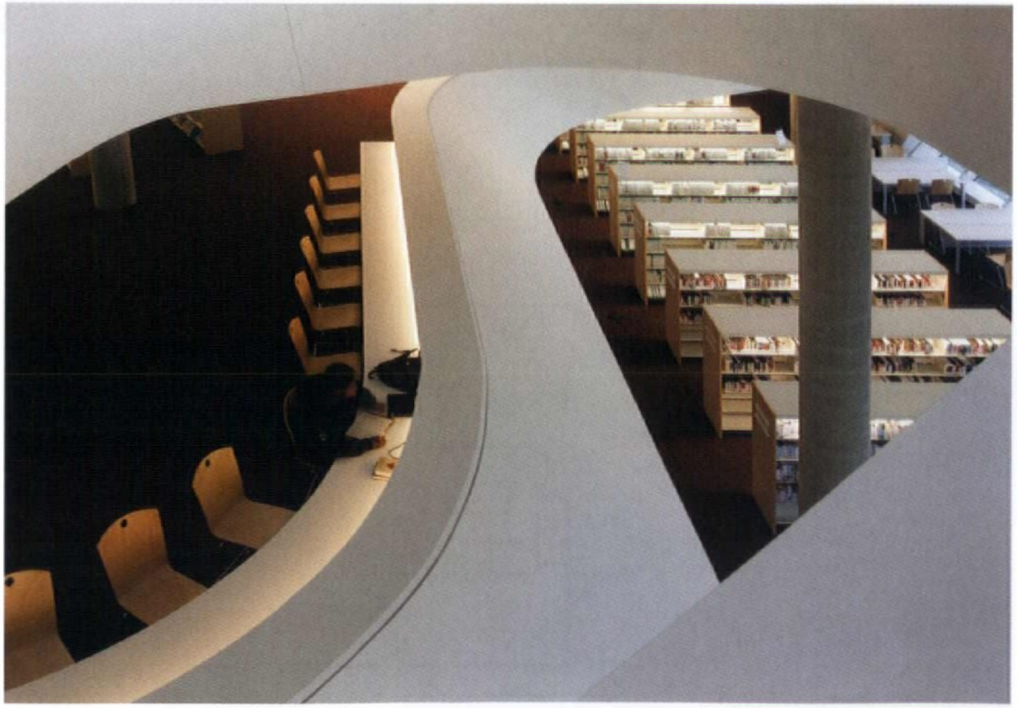
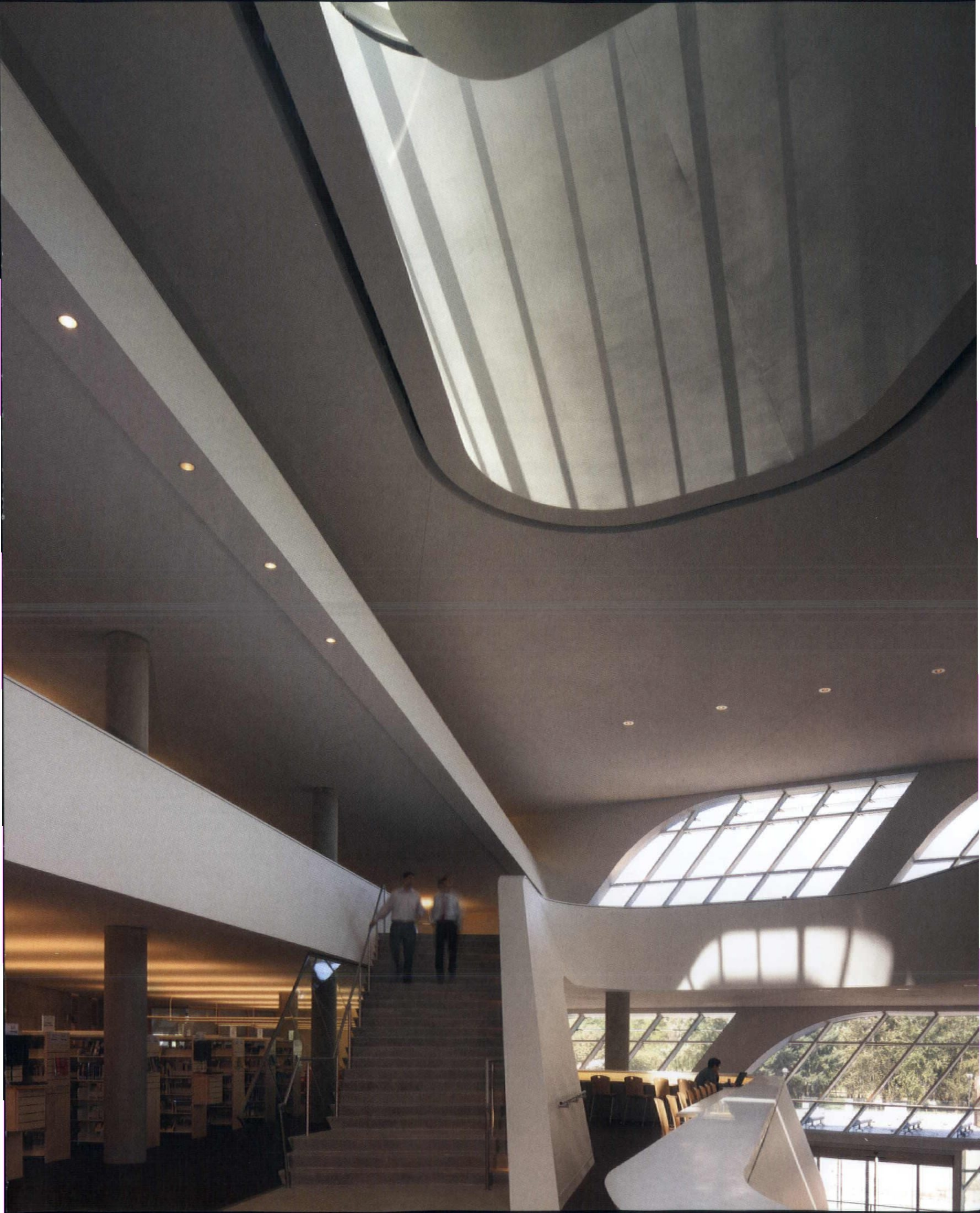
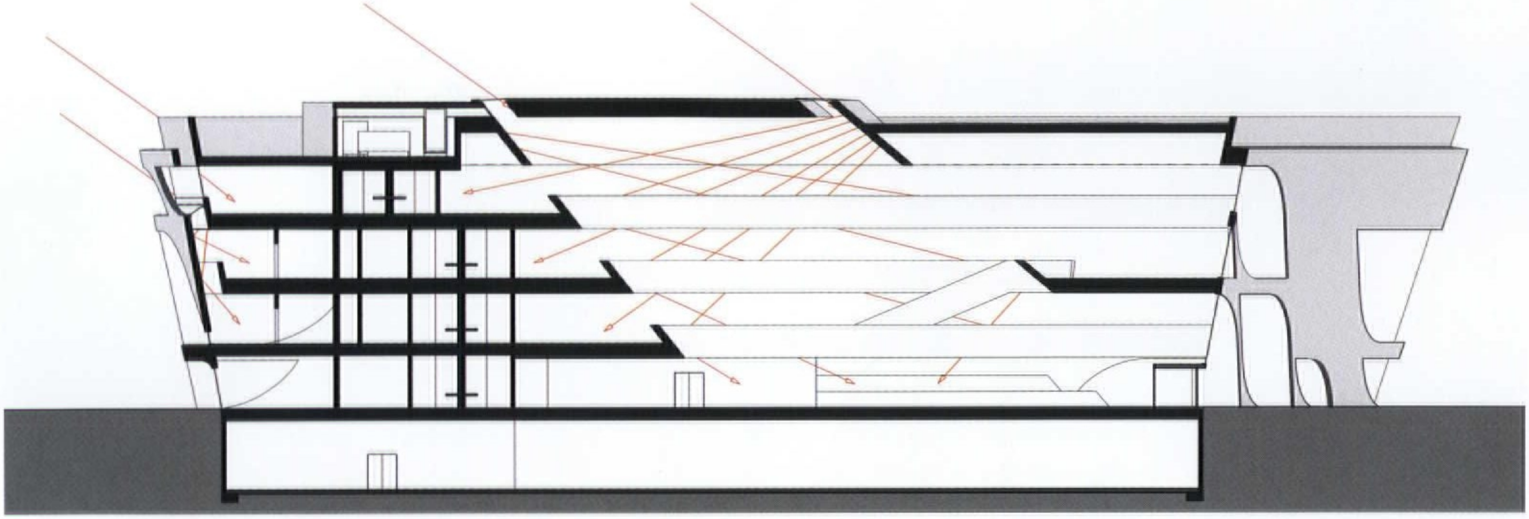
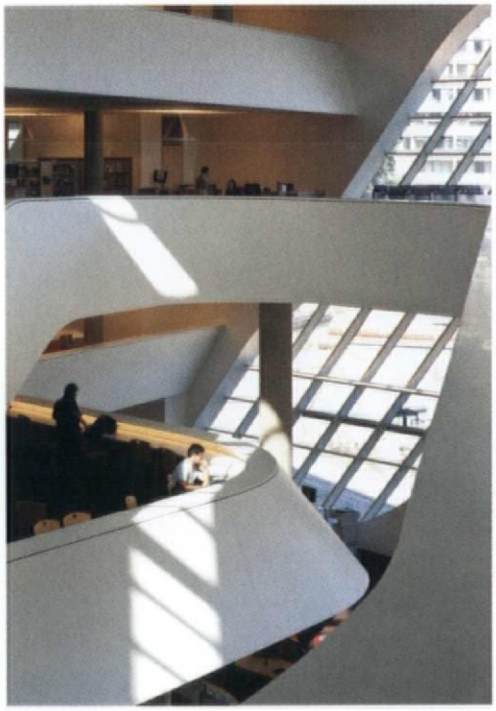






**long section**

6



librarians have elsewhere placed standard pre-fabricated carrels almost randomly around reading rooms and lounges, distracting the eye from the architects' layering of plan geometries (italic L-shaped and reversed italic L-shaped floor plans stacked one upon the other astride the atrium). It's too bad that Thom was not allowed to design furniture to match the architecture and spatial ambience, as Alvar Aalto did for his 1970 Mount Angel Library in Oregon. This is another temple to natural illumination, and a minor late masterpiece, under-rated because of its remote location, as was the case for the work of Bing Thom Architects until its breakthrough Arena Stage in Washington, DC, one of the most lauded American buildings of 2011.

In terms of how this all manifests architecturally, the glib line passed around by Thom's local peers is that the Surrey Library is 'Zaha Hadid on the outside, Guggenheim Museum on the inside'. As for much gossip, there is a germ of truth in both these assertions. Like many of Hadid's projects of the past two decades, the Surrey library boasts unconventional applications of cast concrete, with bold cantilevers and angled walls. Early Hadid works, such as those for Vitra in Basel, were the expensive creations that started with virtual buildings roughed out in overkill steel re-enforcing bar, then surrounded again by even more labour-intensive near-buildings in wood – formwork to shape the concrete to come. The concrete walls in more recent Hadid designs – the MAXXI in Rome and the BMW Central Building in Leipzig – have been achieved with a more efficient and economical means through the use of an unusually flexible concrete formwork system provided by German company PERI. Thom was a North American pioneer in the use of the German-devised system, shaping the concrete cauldrons of his Chan Centre for the Performing Arts in Vancouver, then the more complex forms of the Arena Stage's Kogod Cradle experimental theatre in Washington, DC.

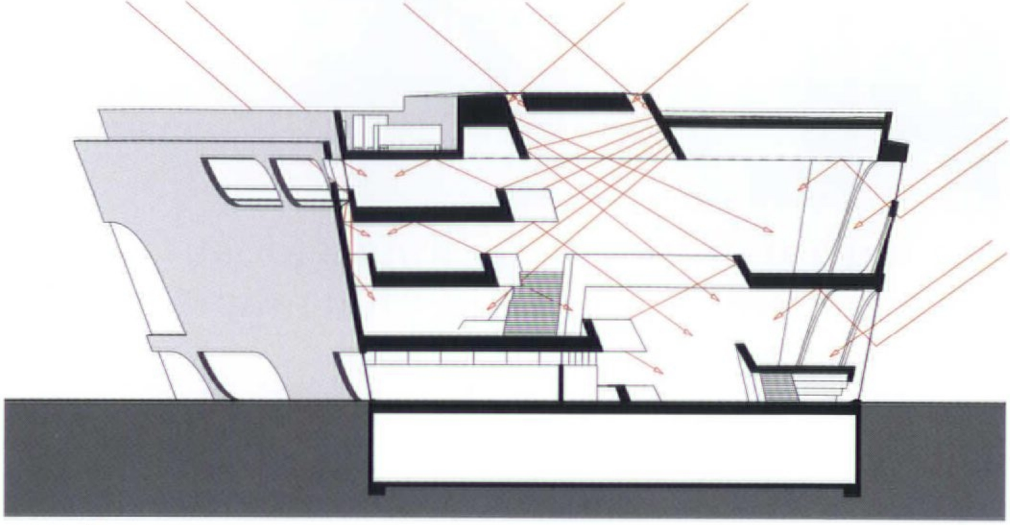
> 'There was simply no time for conventional public meetings on the proposed library design so consultants gathered public input on Facebook, Twitter and other social media sites. Thom is convinced these techniques netted superior suggestions from a variety of citizens'

The Surrey Library needed to be delivered under a tight design and construction schedule so that its civic owners could take advantage of a temporary federal funding programme for so-called 'shovel ready' urban infrastructure projects. Since structural steel delivery times to Vancouver are unpredictable – the city is located more than half a continent away from the nearest steel mill – concrete construction was the only reliable choice, and the PERI system provided flexibility

**Architect**
Bing Thom Architects
**Structural engineer**
Fast + Epp
**Photographs**
Nic Lehoux

**6. Shafts of sunlight animate the soaring space. The sinuous balustrades recall the interior of the original Guggenheim Musuem, reinterpreted for a more modest context**

## Surrey City Centre Library, Metro Vancouver, Canada, Bing Thom Architects



cross section

for complex forms and tightened timeframes for set-up and concrete pours. Standard 1.2 x 2.4m sheets of light plywood were set diagonally on the inside of PERI's flying formwork. The plywood form liners imprint exterior walls with a dynamic set of markings, the resulting building appearing to lean outwards and push forward towards its northern 'prow' – a dynamic icebreaker slicing through suburbia's frozen banality. 'While Hadid's PERI-formed walls are often covered in other materials, for cost reasons we used bare-faced concrete as a final finish, and Surrey is our most sophisticated use of the technology,' says Thom.

The Surrey library is also innovative in its use of another device to shorten its design development and construction approvals period: social media. There was simply no time for conventional public meetings and mail-in feedback on the proposed library design so consultants instead gathered public input on Facebook, Twitter and other social media sites. Thom is convinced that these techniques netted superior suggestions from a wider variety of citizens: 'This is a city of young working families who do not have time to go out to evening open house consultations.'

It resulted in a number of shifts of the building's functional brief – the addition of a lounge for teenagers and an in-library coffee bar. Astonishingly, the formally and technically inventive Surrey City Centre Library went from a standing start to initial construction tenders reaching 70 per cent working drawing completion in a mere four months. When time is ever more money in architecture, this is the way of the future.

With its central skylight, and banded rings of balustrades flanking an atrium, the library's interior at first recalls the Guggenheim's ramp-circled central interior. A second look reveals the library as more nuanced and deflected by light and site concerns than Wright's singular obsession for the ramp-flanked exhibition of art. Ironically, the Guggenheim interior never looked better than when Hadid's career retrospective was installed there in 2006.

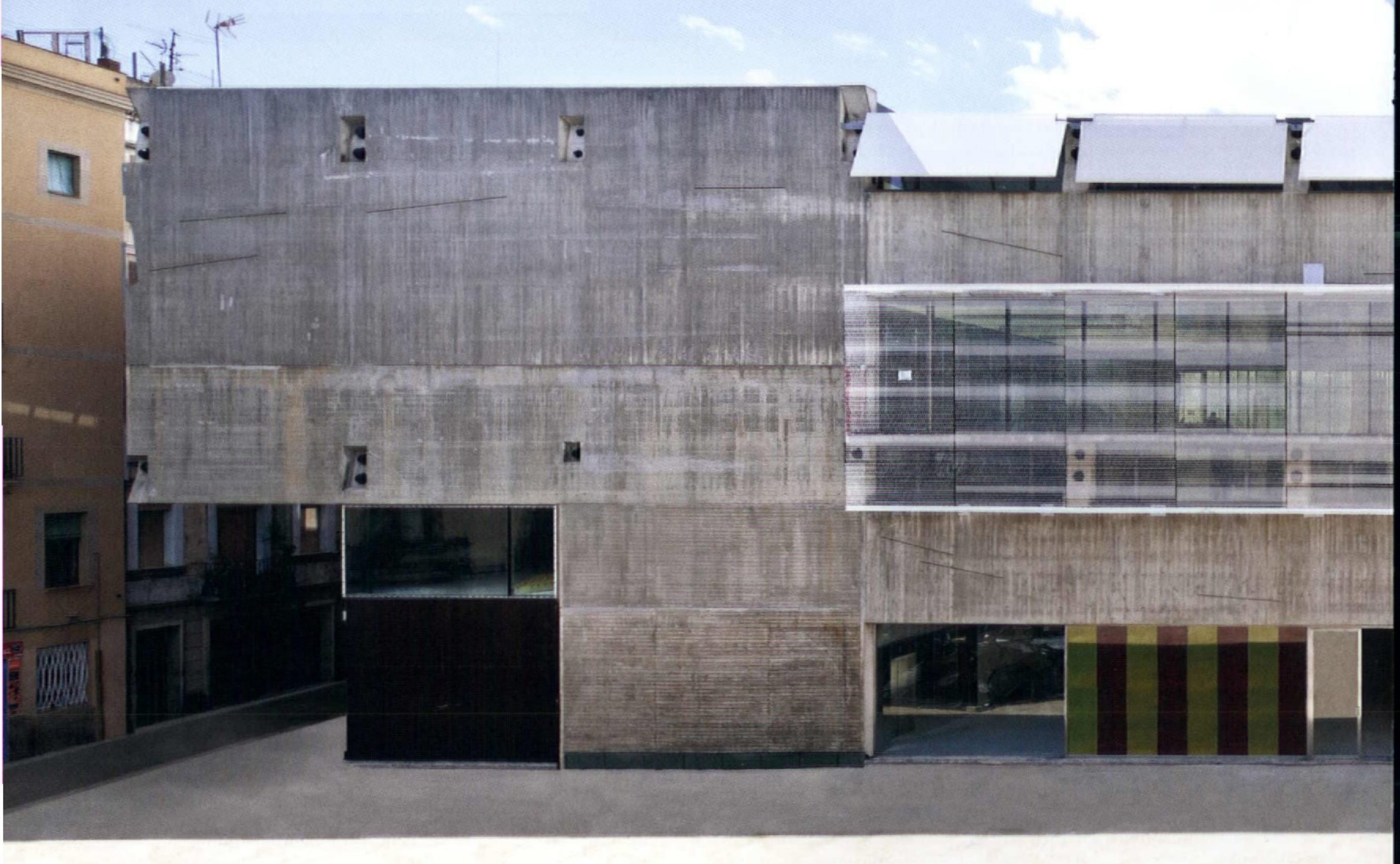
Thom shares credit for the library's design success with Surrey Mayor Dianne Watts, a proponent of what will soon be metropolitan Vancouver's second most important urban hub. Surrey is a multi-nodal postwar suburb previously without a centre, but whose population will exceed Vancouver's in two decades, and where one third of its citizens are under 19, prime time for library use. Mayor Watts says: 'Architecture is something I take seriously – we need collective symbols.' She notes that prior to entering politics: 'I spent 18 years writing specifications [for an architectural hardware concern].'

The city's transformation began with the Bing Thom Architects-designed Surrey Central City (AR September 2003), a hugely ambitious example of the hybridity of building programme, construction palette and formal typologies that have become the hallmark of recent 'Vancouverism'. Thom designed an office tower and university for 3,000 students literally on top of a continuously operating 1970s-vintage shopping mall. Surrey Central City is equally renowned for its innovations in timber construction, achieved with frequent collaborators Gerald Epp and Paul Fast, who are also engineers for the new library. While Thom showed a dramatic model of his vision for an integrated Surrey civic centre in the 'Vancouverism' exhibition at the 2008 London Festival of Architecture, the commission for the civic centre ultimately went instead to the firm also charged with designing the adjacent civic square and city hall components. Surrey's city hall is a vastly less accomplished building, designed in a joint venture between Kasian's Vancouver branch and Toronto's office of Moriyama and Teshima Architects. The best that can be said of this is that it functions as a bland brass setting for the prismatic facets of Thom's gem-like conception.

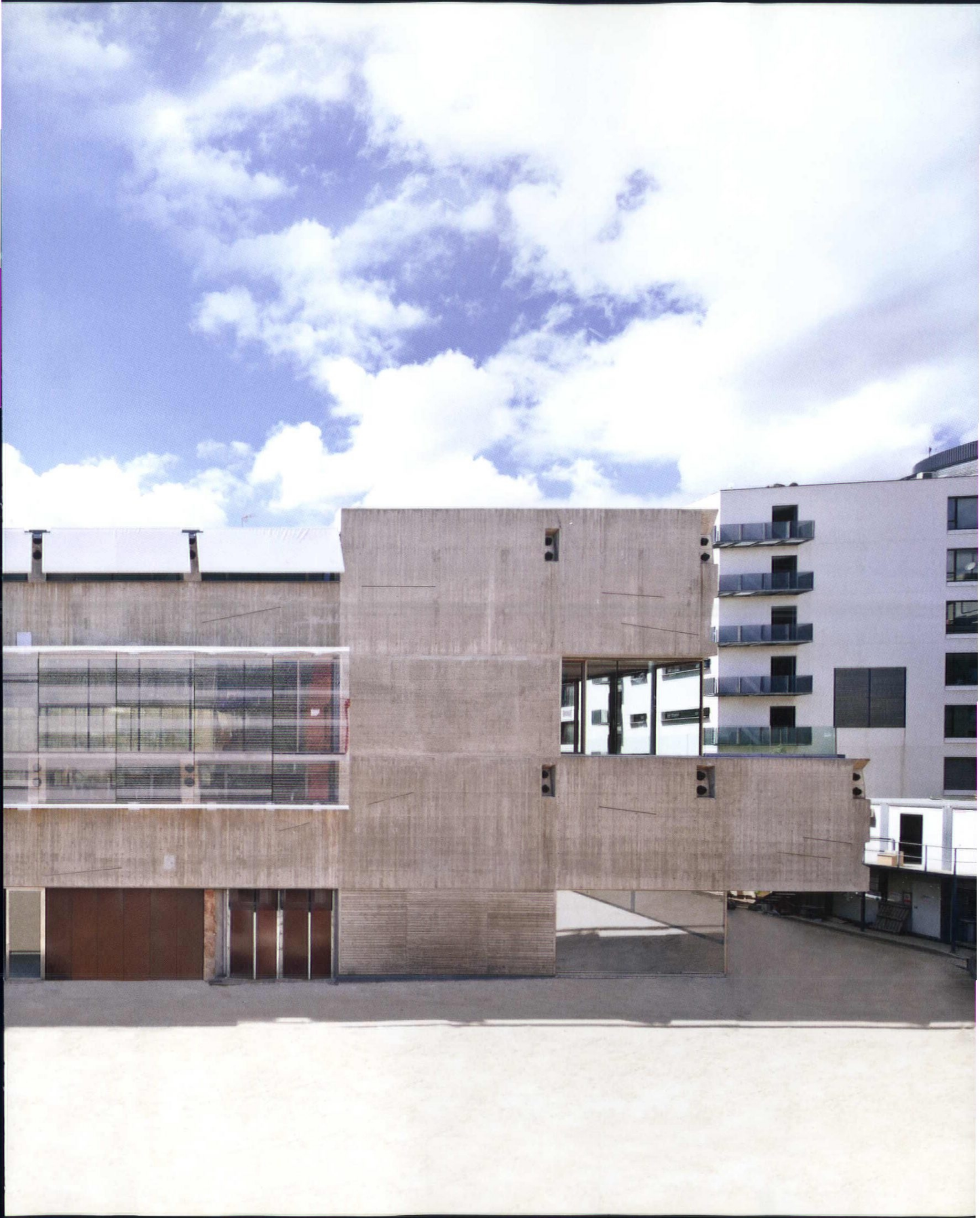
The new library is but four blocks north of the previous Bing Thom Architects' design, but separated from it by a long-standing rag-tag recreation aggregation of pool, ice arena, gyms and the like. Thus with Thom's library and Kasian/Moriyama's new city hall grouped around a plaza to the north, and Thom's Surrey Central City with its notched plaza visually and functionally separated by the recreation complex, this is a dumbbell plan with some boxes set on mid-bar – a particularly dumb move, in my view. This may explain why Thom's new library leans so assertively out over the sidewalks along University Avenue – it's as if the building is straining for a glimpse of its mother building, an infant arching up and out of the pram to reconnect with her parent building. When the recreation centre is relocated in the next decade, Bing Thom's double achievement in re-shaping suburbia will be even more evident.

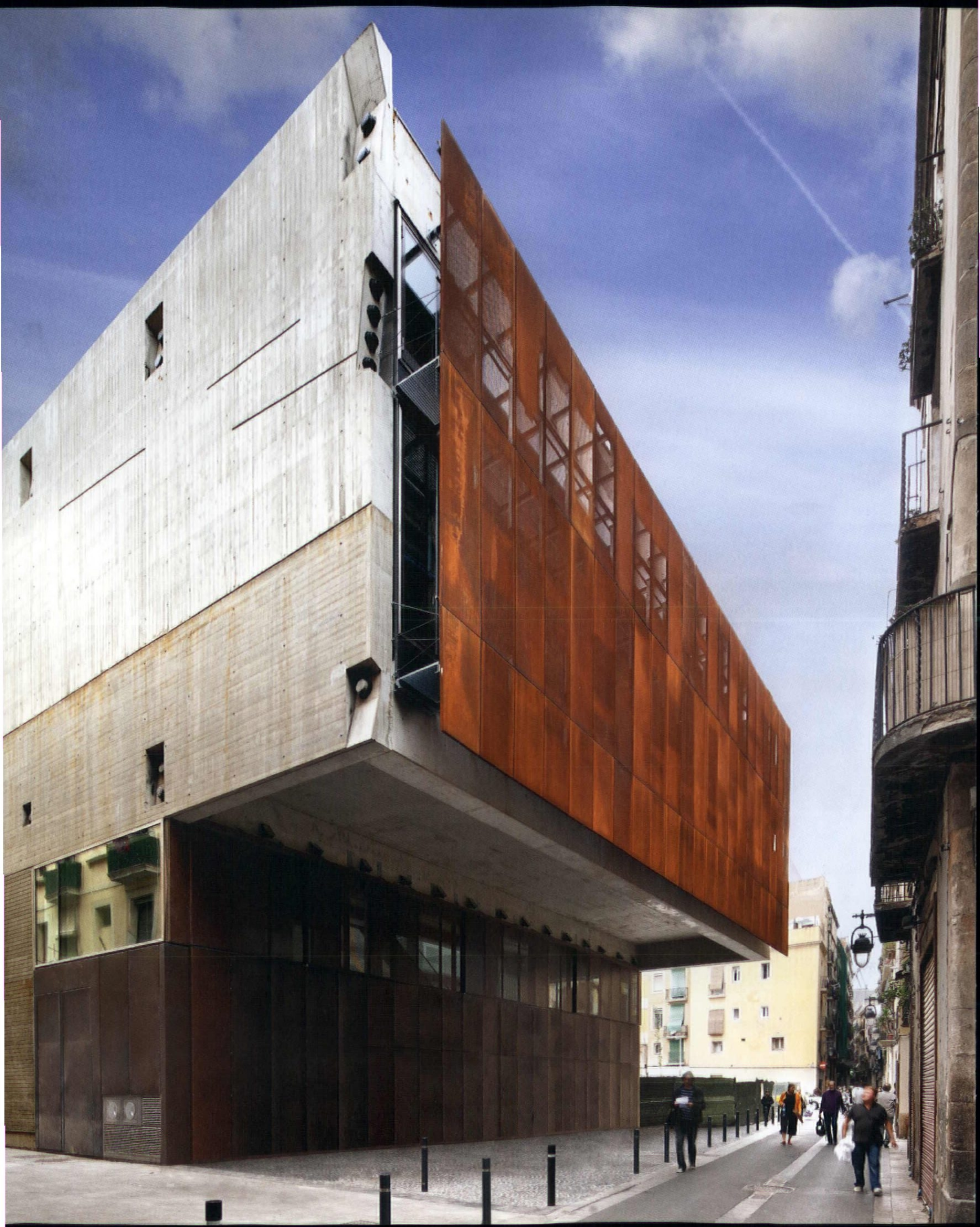
# SCREEN PLAY

Set within one of Barcelona's most notorious slum districts, this new film theatre has ambitions to catalyse cultural and civic renewal



**New Film Theatre of Catalonia, Barcelona, Spain, Josep Lluís Mateo**





**DAVID COHN**

The New Film Theatre of Catalonia, designed by Josep Lluís Mateo, is a cultural beachhead in the ongoing battle for Barcelona's Raval district. One of the densest and most degraded medieval slums in Europe, El Raval is an infamous red light district, home to the city's poorest and most marginalised residents. So far, the city authorities' campaign to reform the neighbourhood has resulted only in spotty gentrification.

Following a 1985 masterplan, the city has brought in a host of cultural institutions to attract outside visitors, including Josep Lluís Mateo's Film Theatre, which will formally open later this year, and Richard Meier's 1995 Barcelona Museum of Contemporary Art (MACBA). In the streets around the theatre, the city has cleared entire blocks to create new plazas and subsidised housing. These efforts have been followed by luxury condos, hotels and trendy restaurants, spilling over from the nearby Gothic Quarter across La Rambla, the famous pedestrian thoroughfare. The clash of high culture, luxury commerce and the neighbourhood's traditional seediness could not be more jarring.

Josep Lluís Mateo is a Barcelona native, and the urban strategy and material texture of his Film Theatre are well-attuned to El Raval's tough character. While Richard Meier's neo-purist composition, a few blocks north, could not be more alien, Mateo's building is constructed of board-formed concrete with a rough texture he compares to nearby peeling walls. 'It has no skin, no ornamentation. It's all material, mass, the basic structure of the building,' he explains.

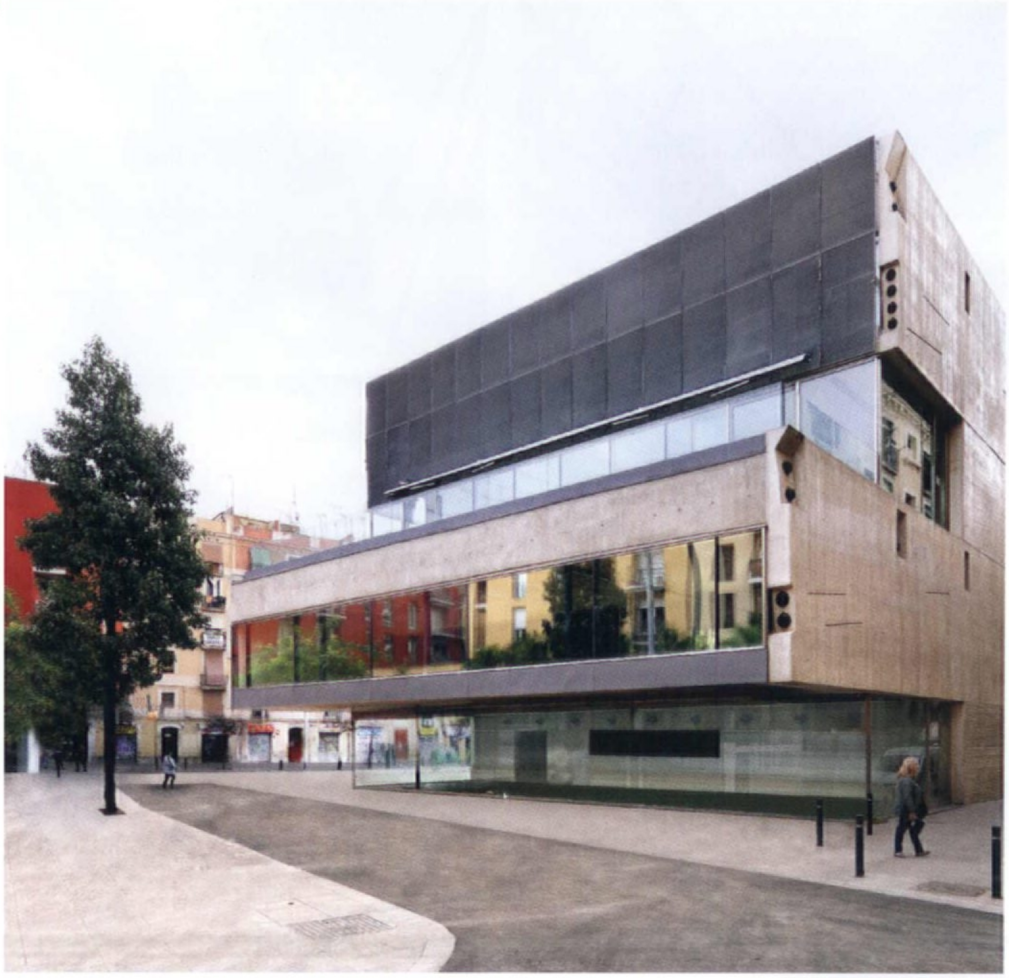
In his competition-winning design of 2004, Mateo minimised the building's volume in order to maximise scarce outdoor space. Working with a site facing the existing Plaça de Salvador Seguí to the east, he set the visible portion of the building at the back of the lot to the west, bringing it hard up against the existing street wall behind it. The long, narrow superstructure, five metres deep, houses offices and the archive's library. He left the rest of the site open to merge into the plaza, and buried the two theatres, seating 200 and 400 people, under it.

Mateo designed the footprint of this building chiefly with an eye to defining this urban room. The ground-floor lobby, framed either side with uninterrupted glass walls and paved in cobblestones, visually extends the plaza through the building. Cantilevers at either end further articulate the urban space. One opens over a narrow intersection on the ancient street Carrer de Sant Pau, one of the main approaches to the Theatre from La Rambla. The other covers a more protected corner, spanning 10m to shelter the outdoor terrace of the café. The resulting pattern of open spaces plays off the courtyards and gardens of adjacent public housing to create diagonal paths and lines of sight. The urban fabric around the building has thus become more porous and complex, more habitable and inviting, and more visually secure.

Another aspect of the design that responds directly to El Raval are the screens that cover most upper-floor openings of the building. Facing the plaza, the windows of the library and offices are screened by a mesh of stainless-steel wire coated in white lacquer, with a weave of different densities that Mateo likens to a film screen that dissolves at its edges. Windows on facades facing into narrow streets are covered with denser screens: punctured Corten steel overlooking Sant Pau, and a perforated and expanded steel sheet, galvanised in a brass-like hue, on the street behind. 'You are so close to the neighbours you have got to filter the views,' says Mateo.

Mateo compares these filters to those used for cameras and lighting on a film set, an association that he develops in a number of rather unconvincing directions. This is the thinking behind the use of coloured panes of glass in the ground-floor window walls, otherwise a bit mystifying, though pleasing when they reappear in the office partitions on upper floors. With their varying densities, the perforations in the Corten screen outline typical window openings, and those of the

3



**1. (Previous page) embedded in the dense urban milieu of El Raval, the elongated volume of the new theatre defines the edge of a new plaza. Yet the opportunity has been missed to screen films in the plaza, a common summer cultural pursuit in Spain, which would have helped to animate the public realm**

**2. (Opposite) cantilevers at either end of the volume articulate the urban space. On the Carrer de Sant Pau, a veil of Corten tempers the theatre's proximity to neighbouring apartment blocks and filters views 3. The rough concrete of the new building plays off the decaying and distressed textures of its surroundings**

## New Film Theatre of Catalonia, Barcelona, Spain, Josep Lluís Mateo

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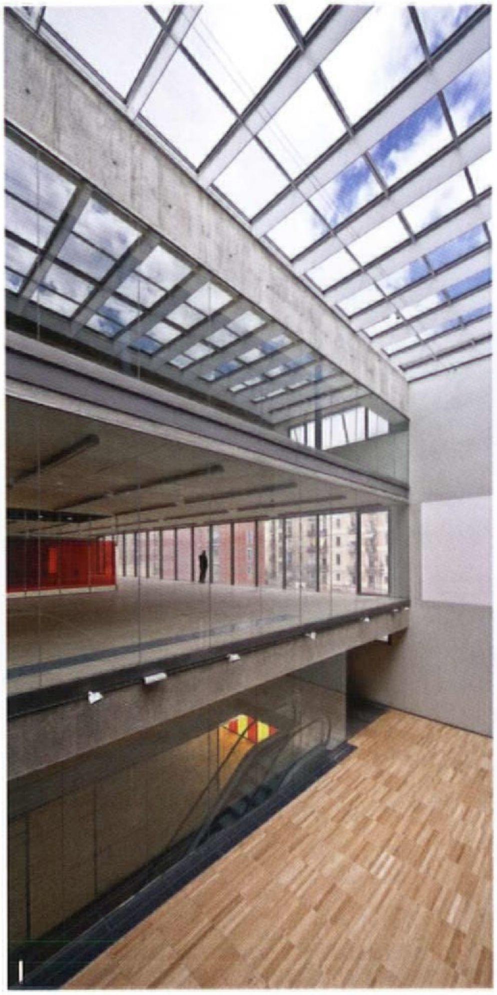

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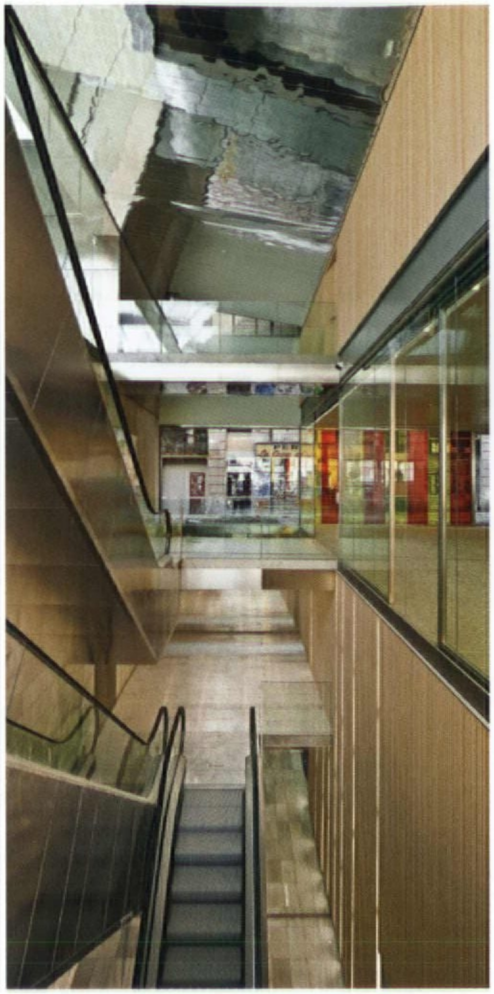


## New Film Theatre of Catalonia, Barcelona, Spain, Josep Lluís Mateo

**4. A skylit circulation well brings light down into the building, diffusing it through glazed walls to illuminate the upper floors. At present, the interiors have a slightly static quality, as the building is not yet furnished and is due to open later this year**
**5. The circulation crevasse penetrates down to the subterranean level containing the building's two cinemas**

galvanised steel trace an early film clip of a bird in flight, but the viewing angles on both facades are too tight to perceive either. There is no harm done on either account, while the variations in density are attractive enough.

In a similar bit of tracery worthy of Peter Eisenman, the acoustic perforations in the timber ceiling of the film theatres outline the foundations of the 17th-century women's prison uncovered on the site (archaeological excavations, such as the discovery of Neolithic remains, delayed the project for two years). This dizzy under-over spatial juxtaposition, placing filmgoers in a situation analogous to underwater divers looking toward the surface, underscores a dialectic that Mateo develops between the telluric descent into darkness of the underground theatres, and the ascent into light of the escalator rising to upper floors, marked by a skylight well above.

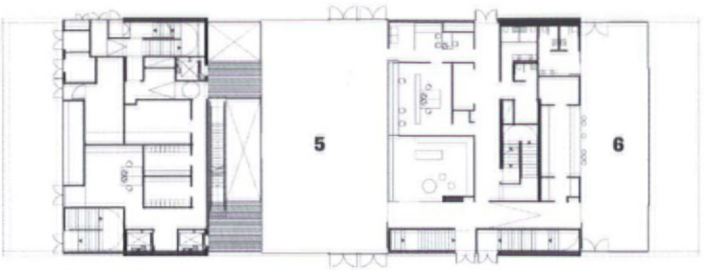
My greatest doubts about Mateo's architectural rhetoric concern the structure itself, which is designed like a bridge spanning between four pylons, with the addition of its powerful, asymmetrical cantilevers. The ground floor and third floor are completely free of intermediate columns or beams, so the floors above them are hung from tension cables, which descend from crossbeams that span between the front and back walls. The concrete is post-tensioned, and Mateo makes the plugs covering the cable ends a design feature, giving the assembly a snap-together, Lego-like quality.

> 'Mateo develops a dialectic between the telluric descent into darkness of the underground theatres, and the ascent into light of the escalator to upper floors'

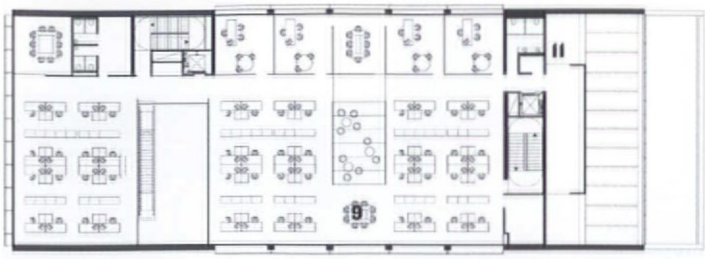
But the structure lacks a spatial dimension and a sense of enclosure. The two planes of its front and back walls are not knitted together visually, and the two spaces carved out of the interior for skylight wells do not bear any direct relation to the pylons or other structural cues; they are simply voids in the floor decks. The non-structural enclosures on the end walls contribute to this planar quality, which in places appears as fragile as a house of cards. Evoking the Neo-Brutalism of, say, Paul Rudolph, the concrete disappoints, while the design as a whole is closer in spirit to the High-Tech architecture of the Pompidou Centre in Paris, for example, a language of free spans and floor-to-ceiling glazing that the hefty presence of the concrete undermines.

Moreover, the need for such structural calisthenics for a simple problem of offices and a library is questionable, while the truly representative and public element of the project, the film theatres, is invisible and underground. José Luis Guerín, a local filmmaker whose documentary on the transformation of El Raval, *En Construcción*, was an important source of reference for Mateo, observed precisely this confusion in an interview published in Mateo's book *Occasions*. He also pointed out the missed opportunity for actually projecting films outdoors on the plaza in the summer, an old tradition in Spain. In the 1930s, film palaces in Madrid were equipped with open-air theatres on their roofs. Why not here?

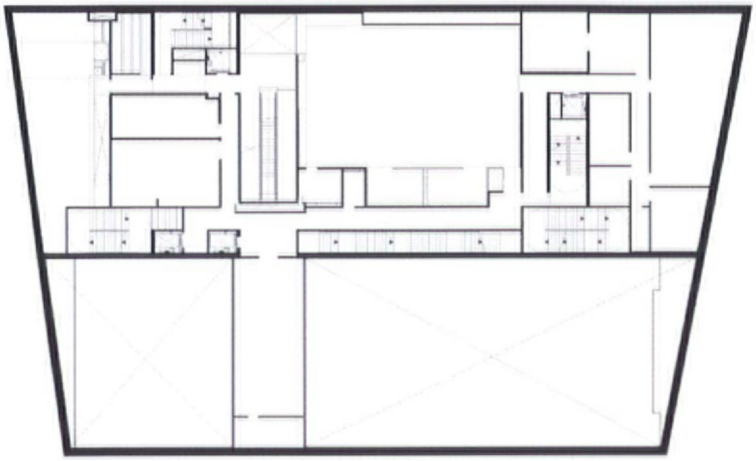
Finally, one annoying detail was probably the client's decision: only one escalator descends to the theatres, which means either that it must be reversed for exiting filmgoers – a tricky proposition with two theatres running simultaneously – or people must walk back up to the street. Why not use some of the funds spent on the structure for a double run of escalators? The client also decided to occupy the handsome free-span space intended for the library on the third floor with its offices, including an executive suite with a balcony overlooking the café terrace, and sent the library down to the more compressed second floor. The new library location is more convenient, and the people who spend their working days at the centre now have classier digs, two facts that once again point out weaknesses in Mateo's design, despite its notable strengths in urban terms.



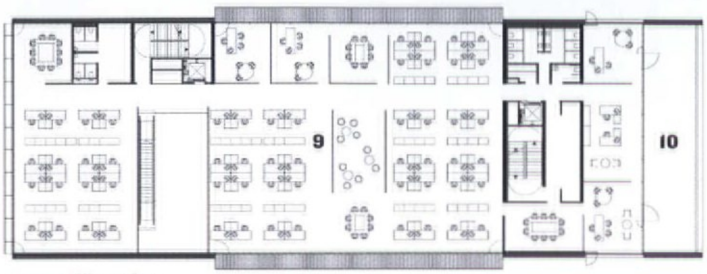
ground floor plan



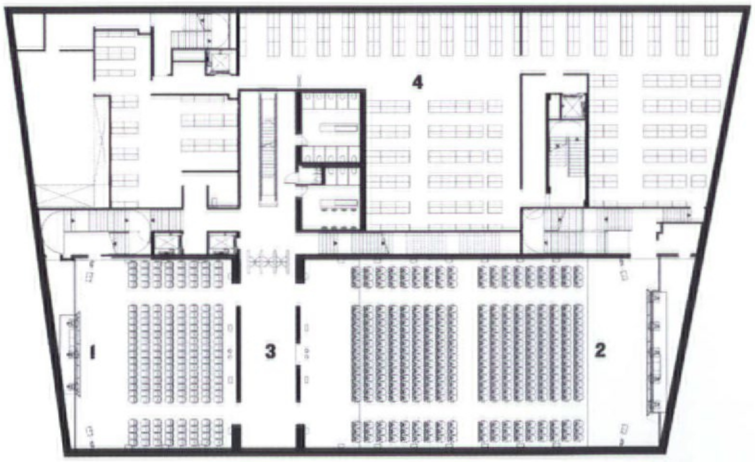
third floor plan



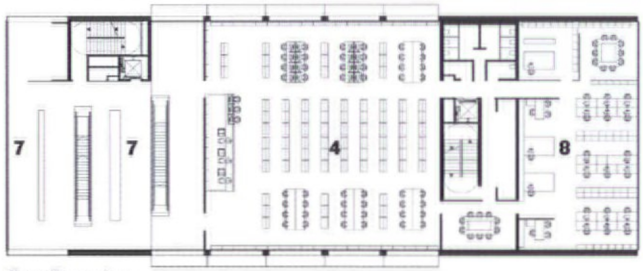
lower ground floor plan



second floor plan

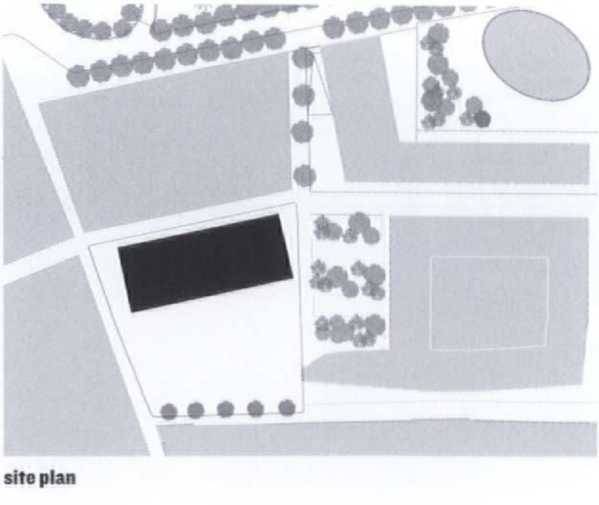


basement plan



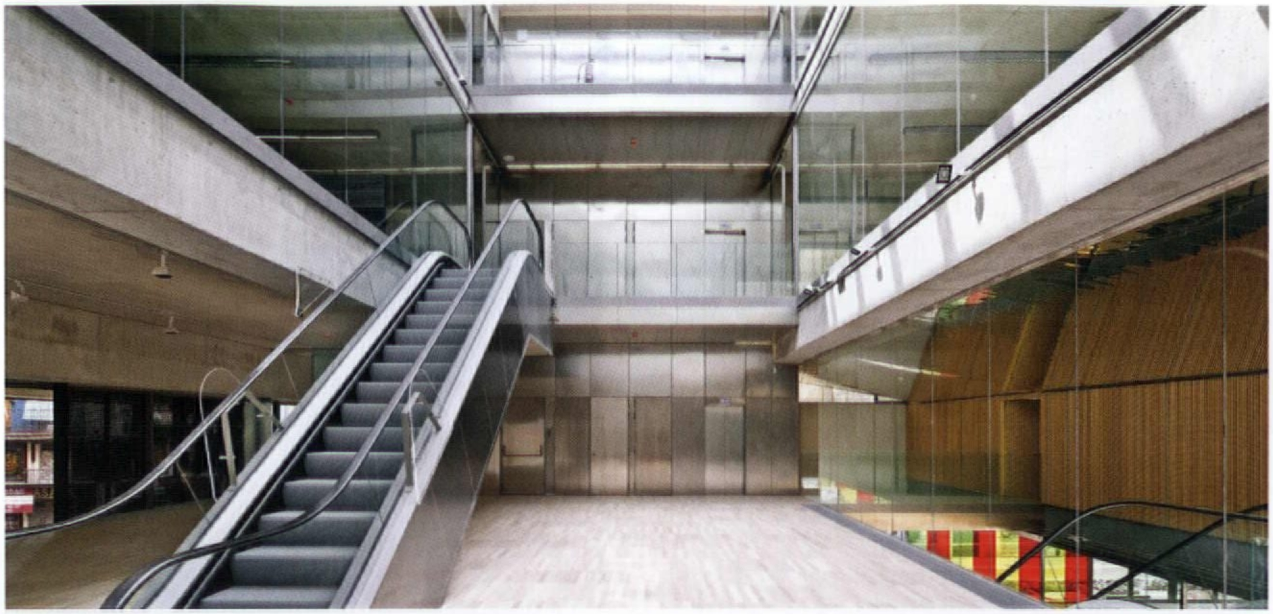
first floor plan

| | |
|---|---|
| 1 | cinema (Laya room) |
| 2 | cinema (Chomón room) |
| 3 | cinema foyer |
| 4 | library |
| 5 | entrance foyer |
| 6 | bar |
| 7 | exhibition space |
| 8 | library offices |
| 9 | offices |
| 10 | terrace |
| 11 | technical services |



site plan

6



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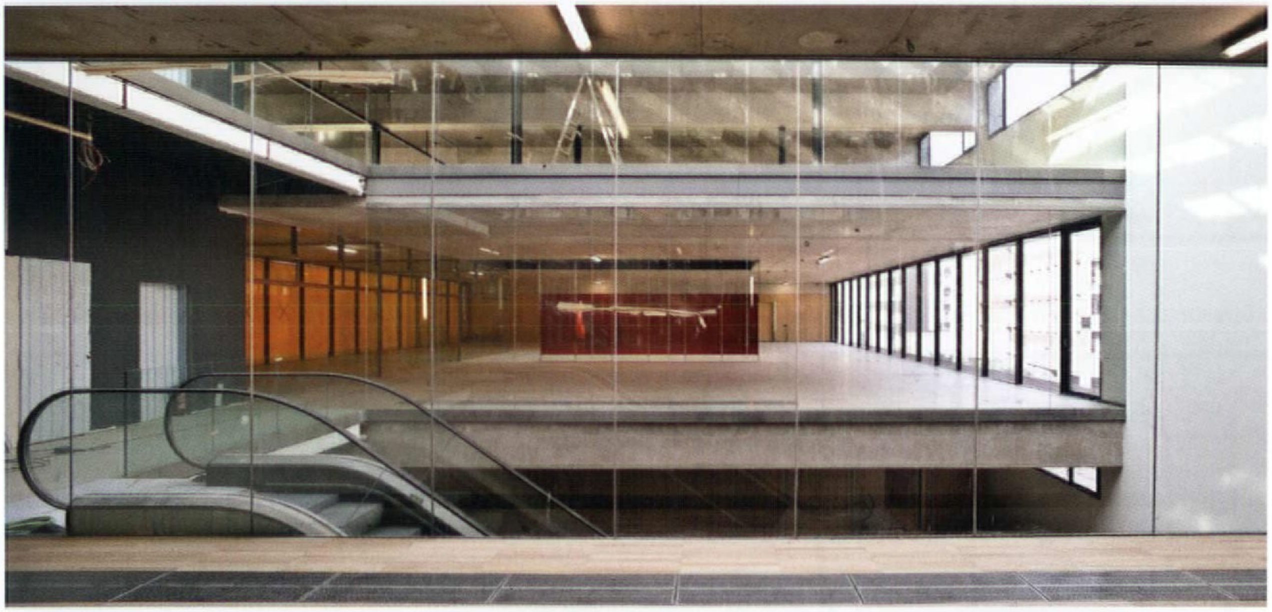

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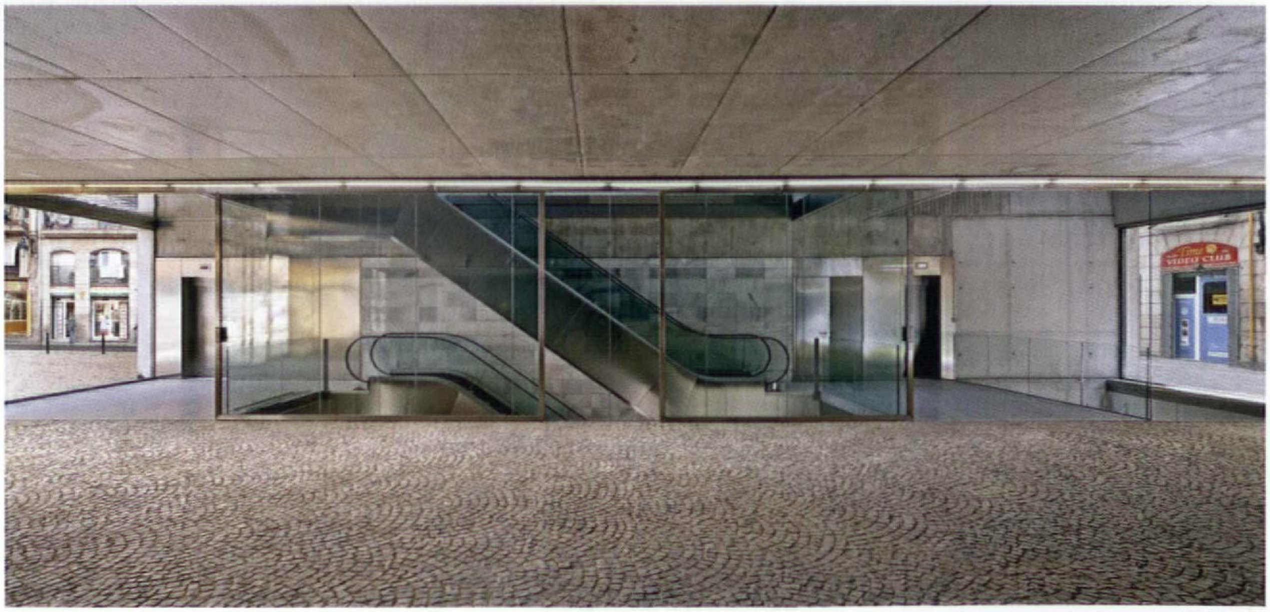
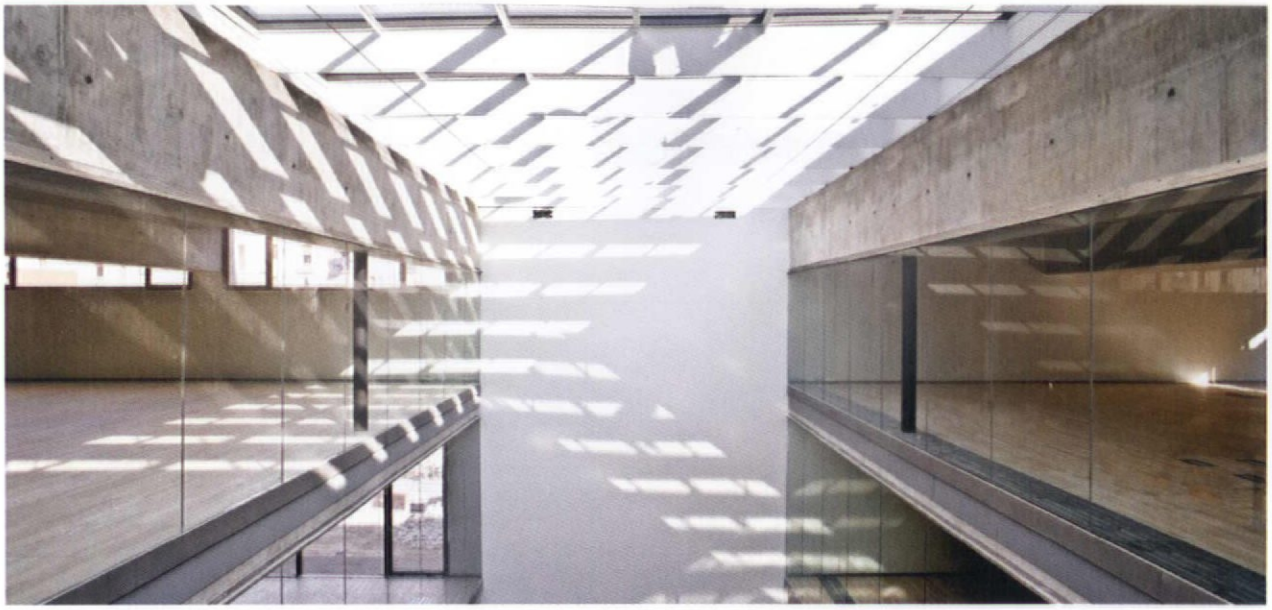


**6. The language of free spans and floor-to-ceiling glazing gives the interior a sense of lightness, yet this is undermined, to some extent, by the heavy presence of the concrete**
**7. Panels of coloured glass demarcate offices at the upper level**
**8. Delicate fantail cobbles extend the plaza through the building, making it publicly permeable and encouraging exploration by the casual visitor**
**9. Shadowplay at the top of the lightwell. The upward trajectory is an ascent into light, experientially playing off the telluric descent into the dark underworld of the subterranean cinemas**
**10. Detail of mesh cladding, one of the filtering devices applied to the external walls to screen views. Mateo also uses coloured glazing at ground-floor level**
**11. The interiors await colonisation. Throughout the building, the presence of the city is palpable**

**New Film Theatre of Catalonia, Barcelona, Spain, Josep Lluís Mateo**

9



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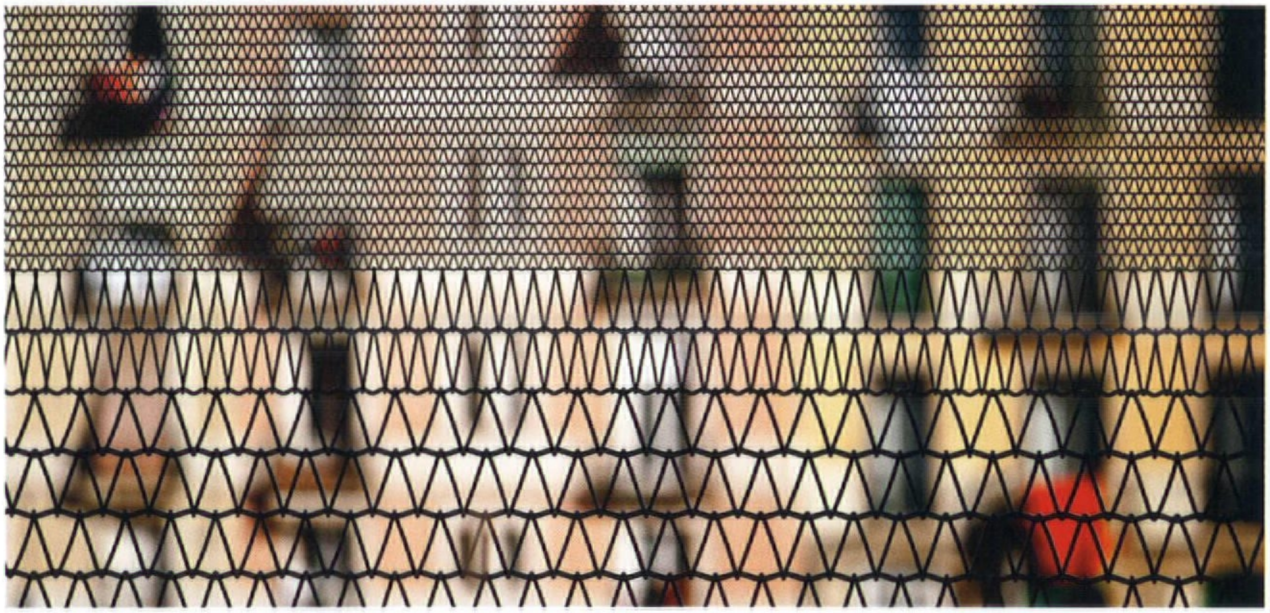

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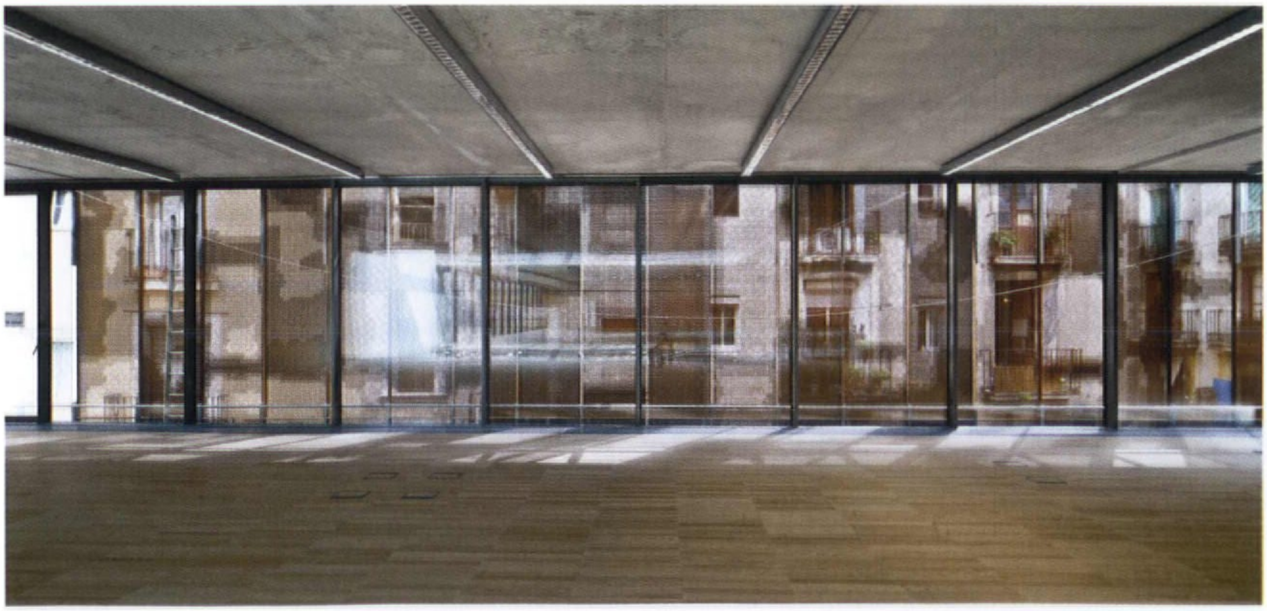
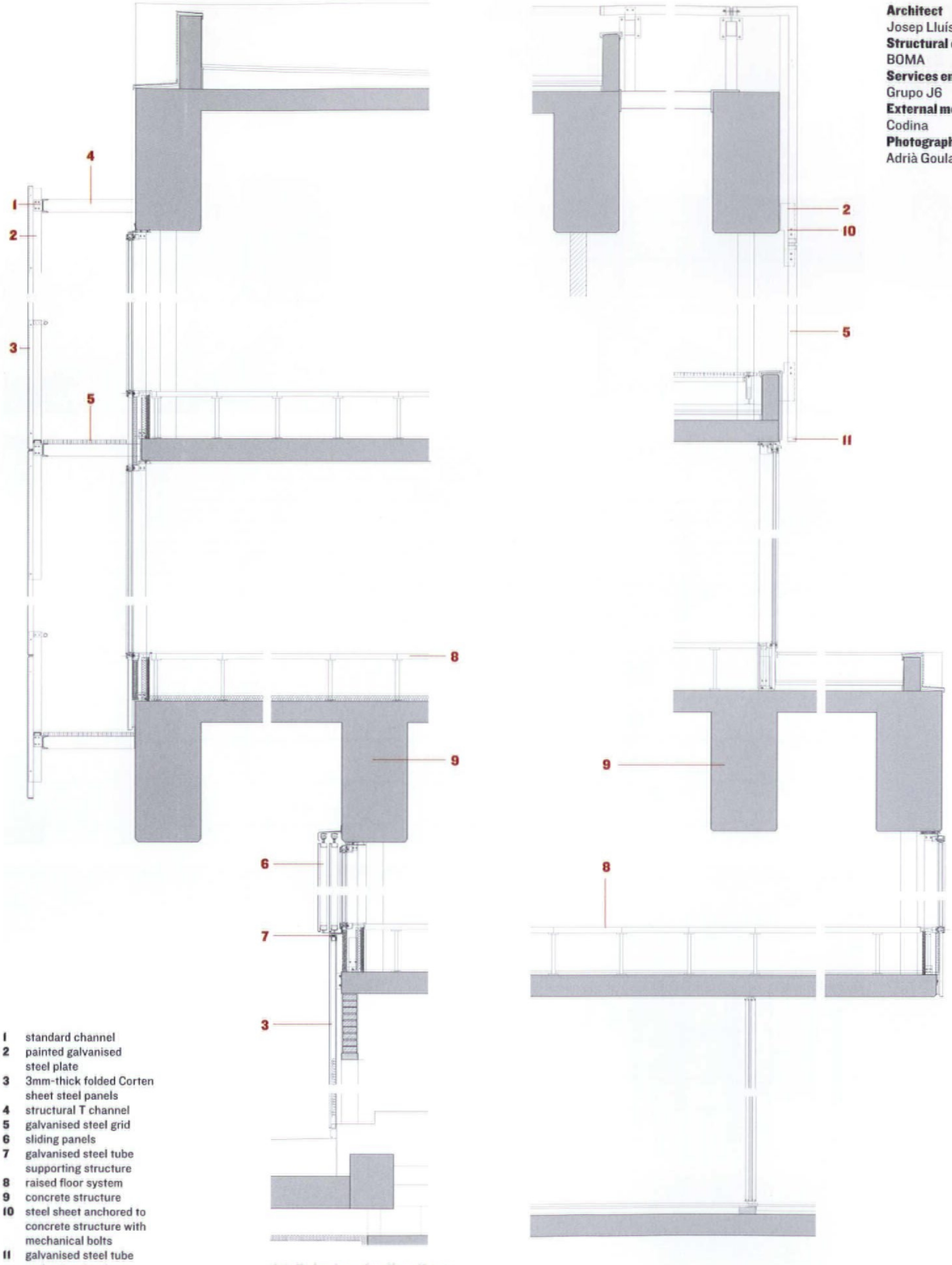


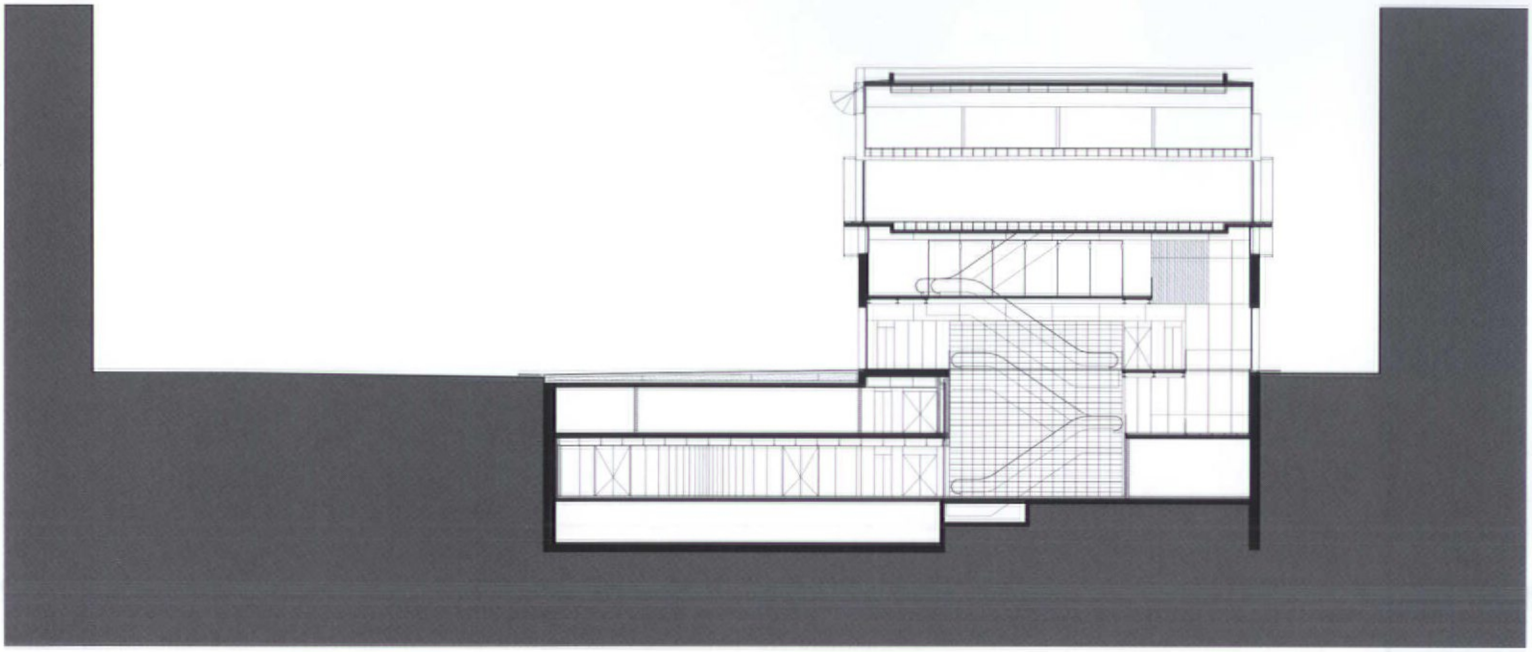
**Architect**
Josep Lluís Mateo
**Structural engineer**
BOMA
**Services engineer**
Grupo J6
**External mesh**
Codina
**Photographs**
Adrià Goula



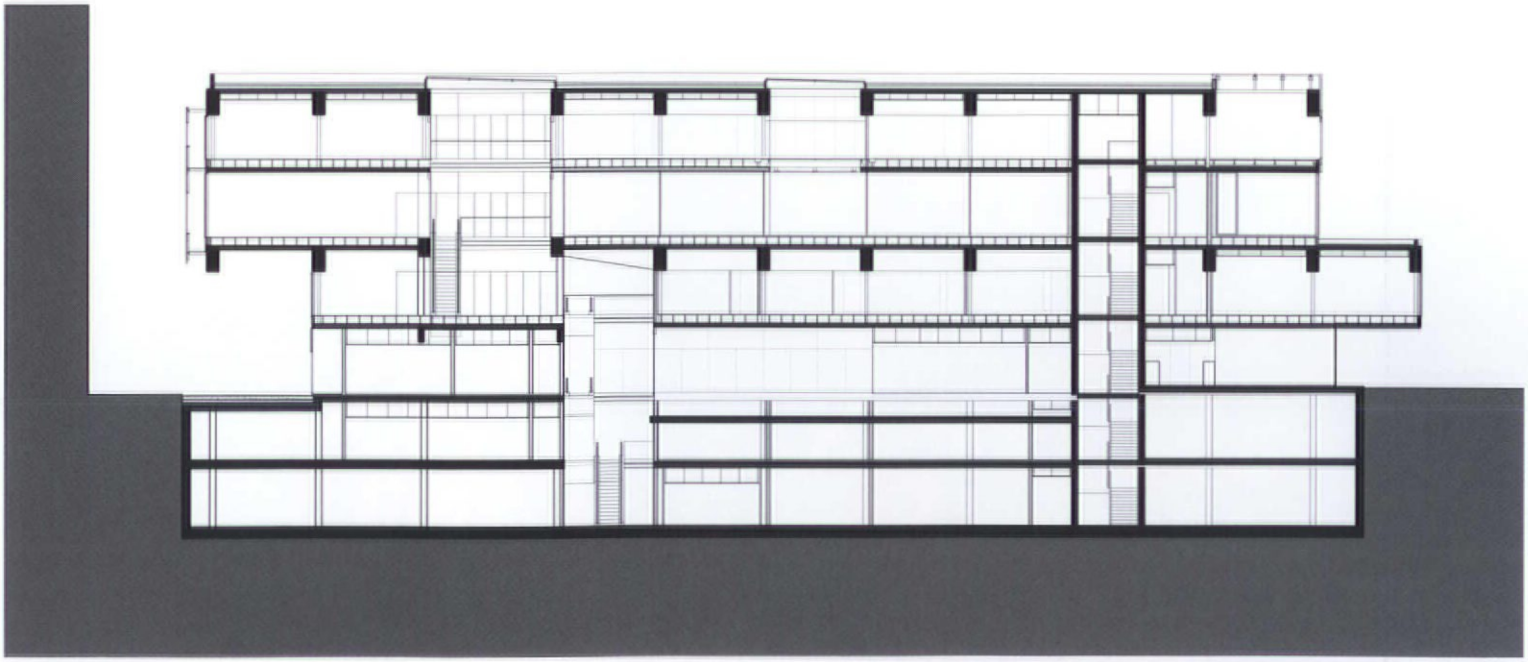
1 standard channel
2 painted galvanised steel plate
3 3mm-thick folded Corten sheet steel panels
4 structural T channel
5 galvanised steel grid
6 sliding panels
7 galvanised steel tube supporting structure
8 raised floor system
9 concrete structure
10 steel sheet anchored to concrete structure with mechanical bolts
11 galvanised steel tube perimeter structure

detailed external wall sections

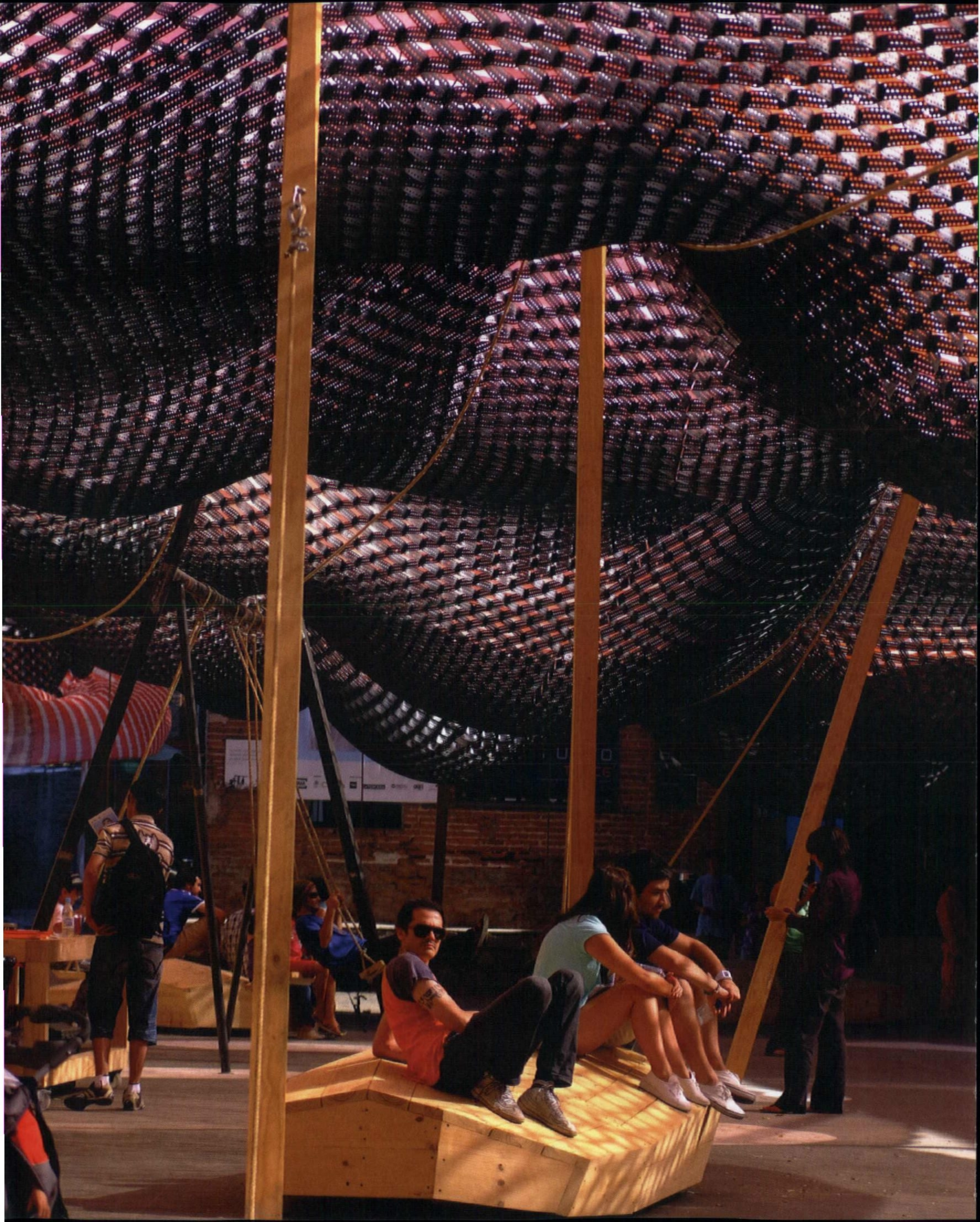
## New Film Theatre of Catalonia, Barcelona, Spain, Josep Lluís Mateo

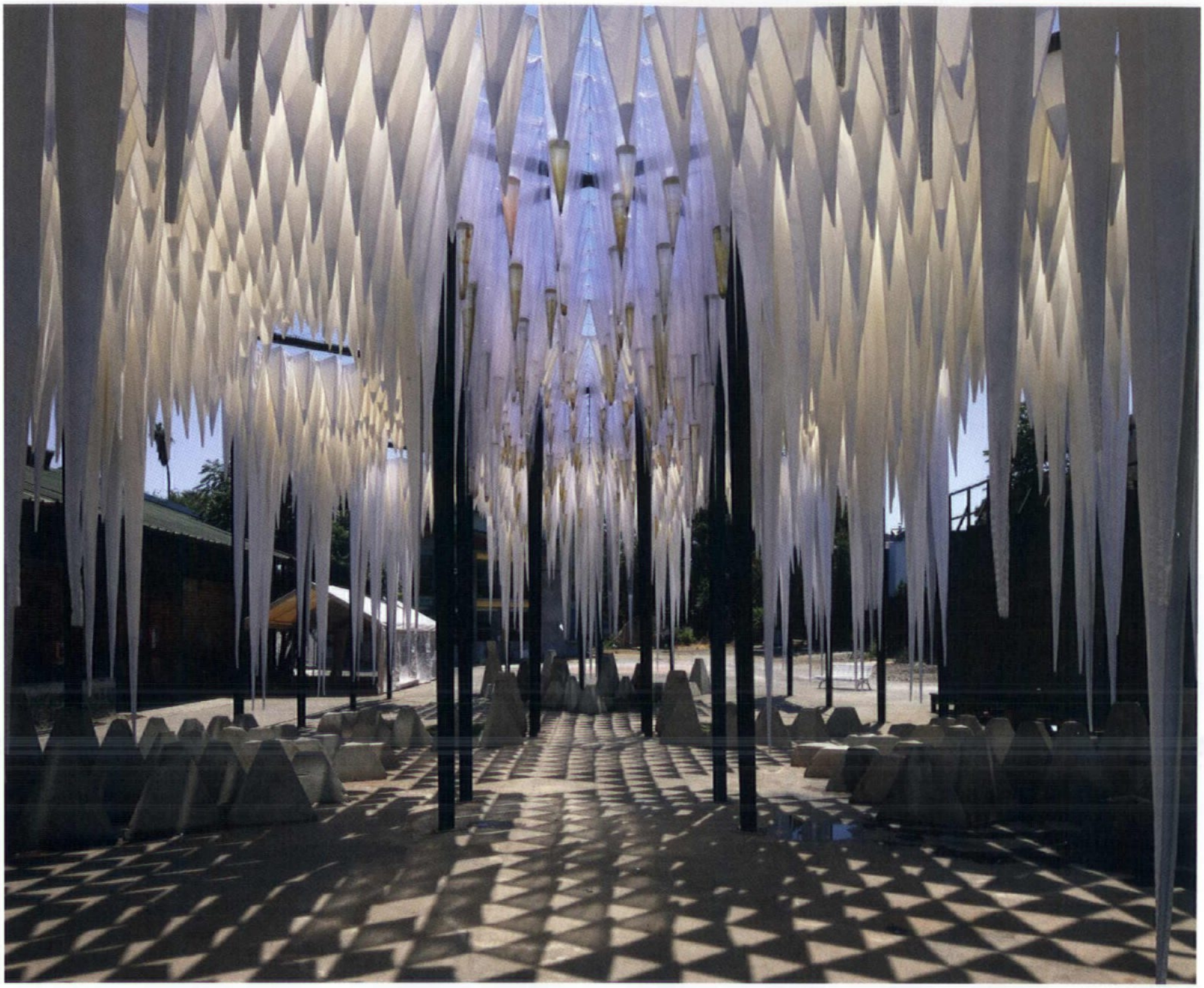


**cross section**



**long section**





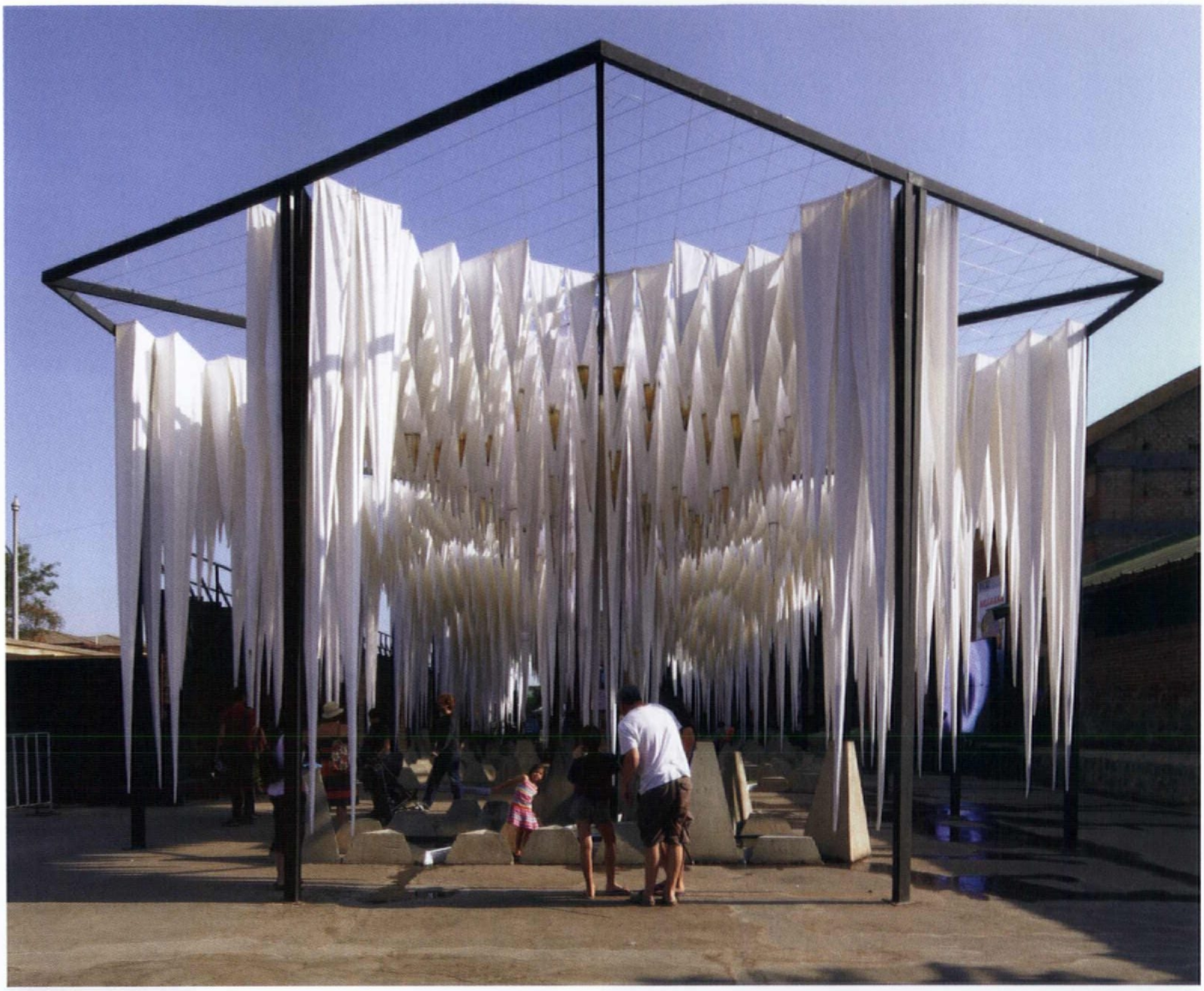
# POLES APART

An annual commission for a young architect in Santiago de Chile has produced a fabric canopy and a water cathedral – two very different pavilions with an equally dynamic effect

**Water Cathedral, Santiago de Chile, GUN Arquitectos**

**Color Shadows, Santiago de Chile, Eduardo Castillo**

3



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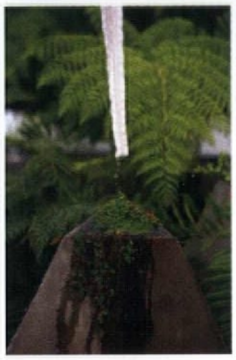
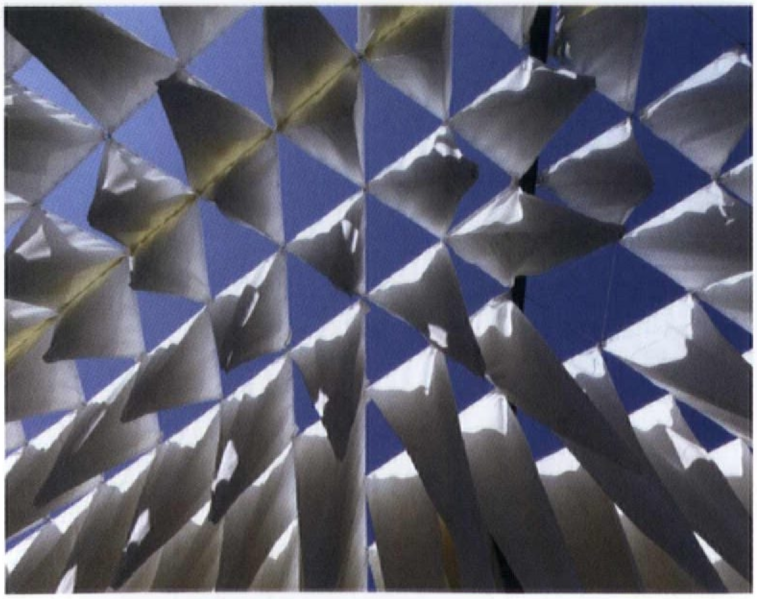


1. (Previous page) the sinuous fabric roof of the canopy of Color Shadows
2. (Previous page) the Water Cathedral's arches appear like a Gothic nave
3. The cathedral oozes water, to the delight of visiting children
4. A detail of plant life that grows amid the droplets of water in the living space
5. The cathedral is formed through the suspension of fabric bags on steel poles
6. Inside the cathedral, an impression of stalactites in a cave emerges

5



## Water Cathedral, Santiago de Chile, GUN Arquitectos

**MICHAEL WEBB**

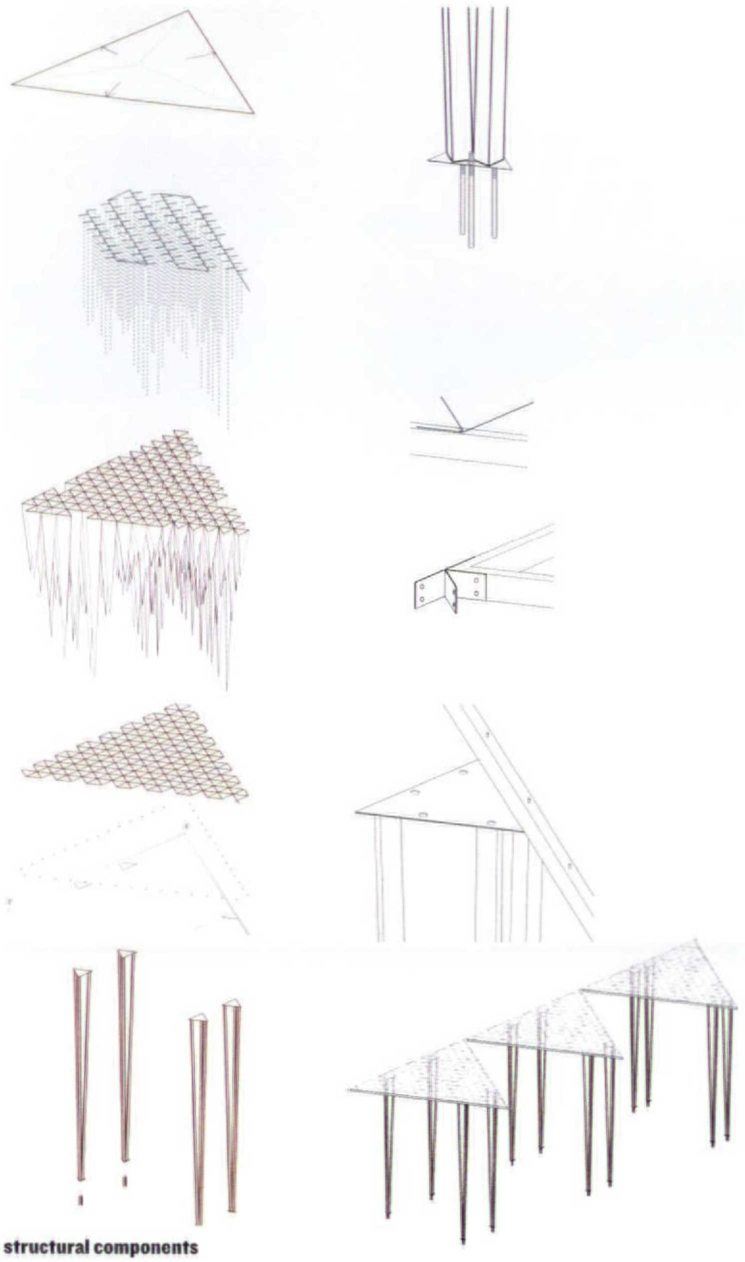
Summer is cause for celebration in Santiago de Chile: three months of clear skies and dry heat when the smog lifts to reveal the spectacular backdrop of the Andes. The city begins to empty out and February can appear as quiet as August in Paris. The next best thing to the beach is a shady pavilion in which to gather with friends, and Santiago hosts its own version of the social condenser that the Museum of Modern Art (MoMA) has installed each year since 1999 at its PS1 satellite gallery in the New York borough of Queens.

This is a product of the Young Architects Program, which challenges emerging architects to create an outdoor installation providing shade, seating and water while using recycled materials and showing a high level of sustainability. Some 25 architects are nominated and a jury chooses a winner from five finalists. Now MoMA and MoMA PS1 are establishing an international network in their partnership with the European institution MAXXI in Rome, and collaboration with a Young Architects Program in Santiago.

In Santiago, this initiative is organised by CONSTRUCTO – a partnership of Jeannette Plaut and Marcelo Sarovic. For this summer's presentation, GUN Arquitectos was selected to create the Water Cathedral, a dynamic cluster of tapered white fabric bags, suspended from steel frames and gently oozing water. Depending on the play of light and time of day, it evokes the appearance of stalactites in a cave or the arches of a Gothic nave. As you stroll through and gaze upwards, the elements shift in kaleidoscopic patterns. Truncated pyramids provide seating and spotlights transform the installation into a spectral grove after dark. It is located in the walled forecourt of Matucana 100, a cultural centre that Martin Hurtado Arquitectos Asociados created a decade ago in the shell of a century-old brick warehouse.

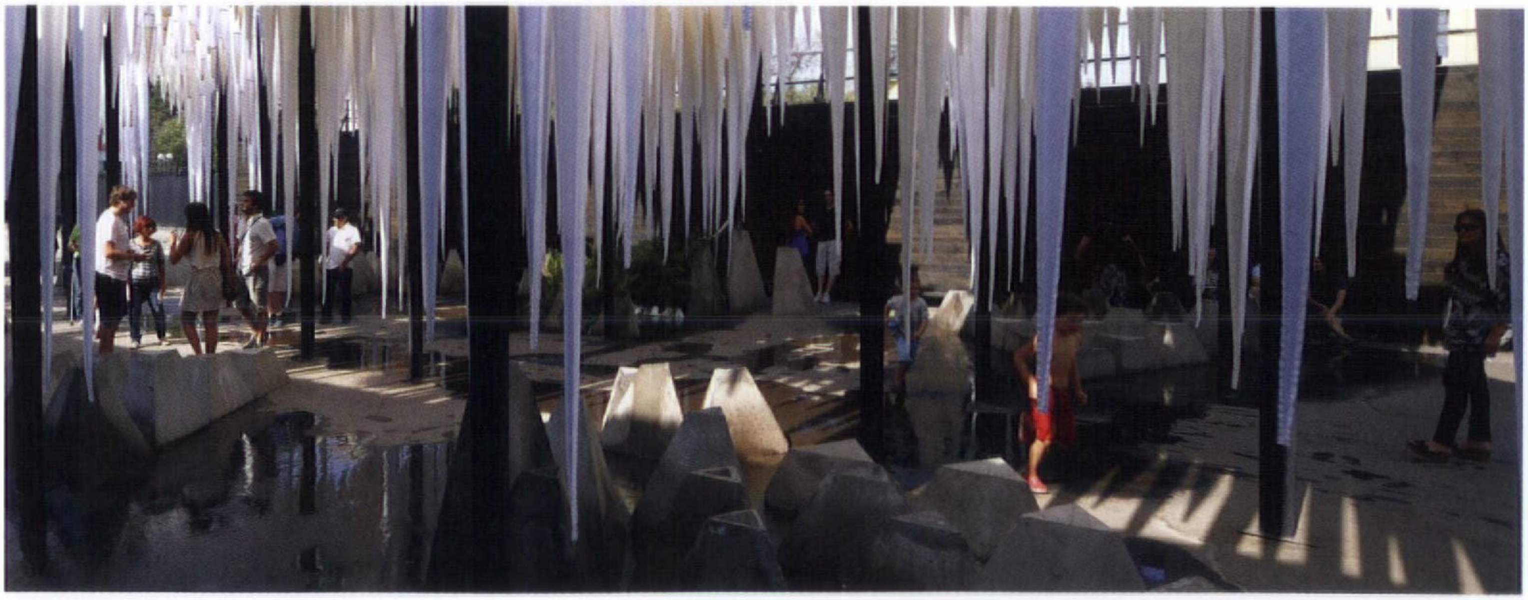
Jorge Godoy founded GUN Arquitectos in 2009 in partnership with Lene Nettelbeck from Berlin. He graduated from the Valparaíso campus of the Pontificia Universidad Católica de Chile (PUC), a radical sibling of the main school in Santiago, and did his postgraduate work at the Architectural Association, staying for seven years in London to teach, work and conduct research. Back in Chile, he and his partner continued to experiment, creating a pavilion of woven green bamboo and developing an irrigation project in the desert. Currently, they are masterplanning a self-sufficient community near the Tongoy Peninsula in north-central Chile, designing the infrastructure, energy systems and housing typologies for an area that is shifting from farming to tourism.

'Water Cathedral is a laboratory to test structural and



structural components

6



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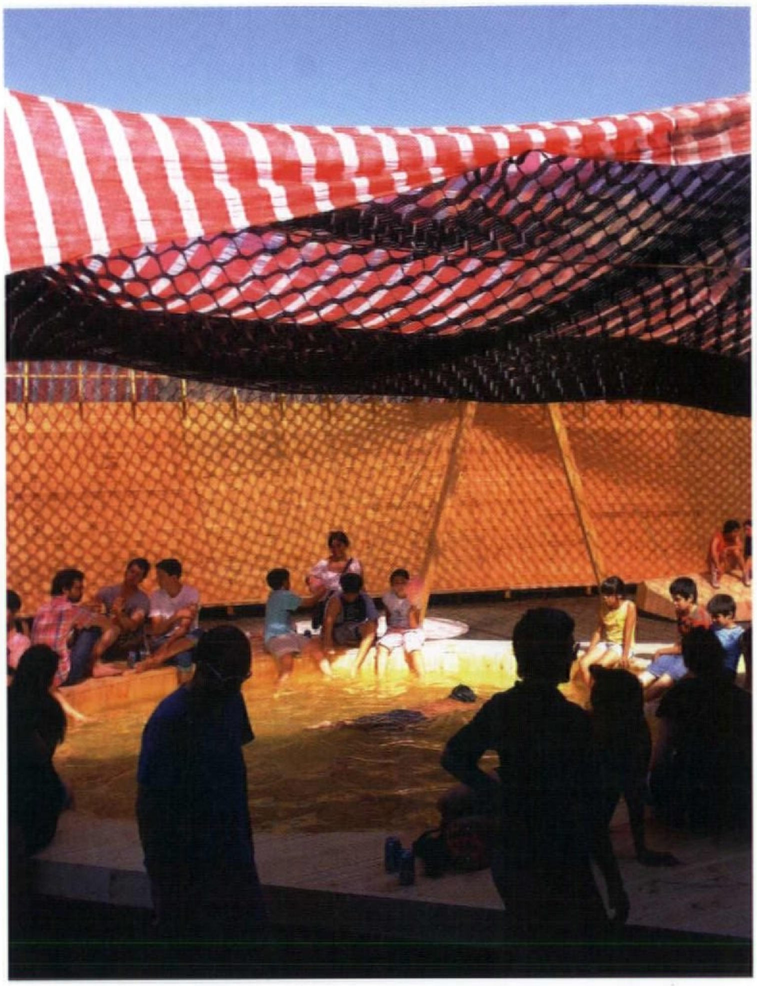


**Water Cathedral Architect**
GUN Arquitectos
**Photographs**
Cristóbel Palma

**Color Shadows Architect**
Eduardo Castillo
**Structural engineer**
Patricio Bertholet
**Photographs**
Cristóbel Palma

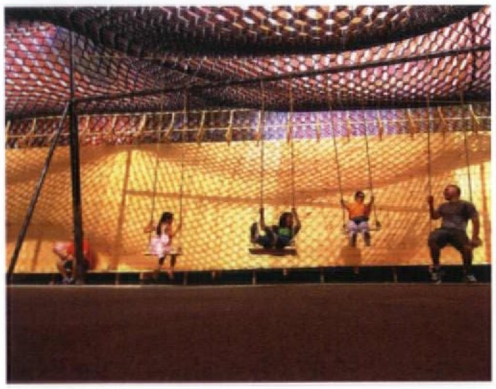
material principles that might be employed on a larger scale for permanent structures,' says Godoy. The apparent simplicity of the installation is deceptive; it is the product of intensive research into the dynamics of water and the stalactites that grow from the sediment in moisture that filters down through the roof of a cave. The architects considered many possibilities before selecting fabric bags filled with sand. A hydraulic network atop the grid of triangular steel frames provides measured amounts of irrigation. This gathers within the plastic-lined bags and travels upwards by capillary action, dripping out through the seams. Puddles appear and evaporation cools the air.

This is the second edition of the Young Architects Program in Santiago. The first was designed by Eduardo Castillo, a long-time associate of Smiljan Radic, whose practice is enjoying a renewed surge of activity. They recently won a competition for a mobile theatre in the southern city of Concepción, a project that draws on new technologies of lightweight construction as well as the wood vernacular. Castillo, who first worked as a carpenter with his father, made his debut with a wooden chapel in southern Chile. For the Young Architects Program, he created a loose canopy of woven fabric supported on angled wooden poles. Entitled Color Shadows, it was inspired by the temporary shelters created for spring celebrations in the Central Valley of Concepción. Faceted wooden benches offered seating, children could splash in a raised pool and a lateral wall recalled the agricultural buildings of the region.

The Young Architects Program provides opportunities for a fledgling firm to test its ideas in a public space, and be actively engaged by a young audience. Chile is a country that enjoyed a flowering of creativity as General Augusto Pinochet's dictatorship weakened in the late 1980s and a long tradition of democratic government was restored. Today, a new generation is vying with its seniors for important commissions. 'Change is moving in our direction,' says Godoy. 'There is so much space and freedom to do all kinds of things.'

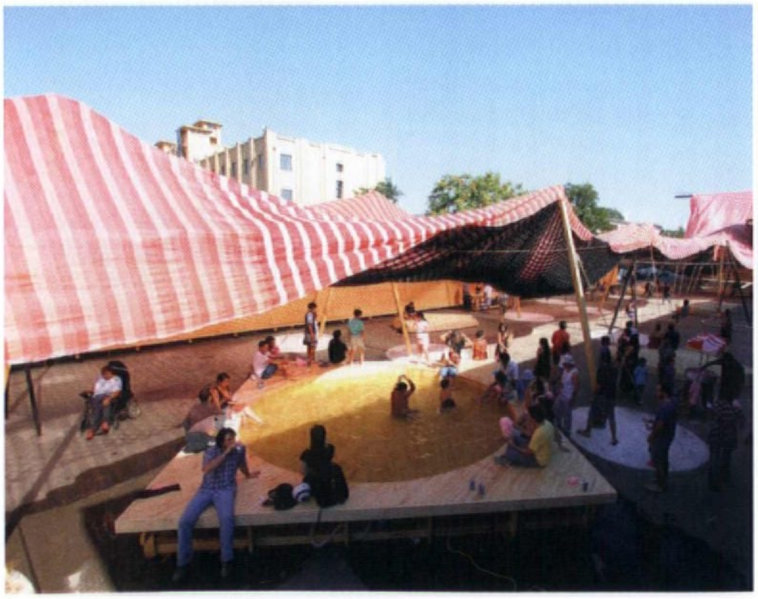
Jeannette Plaut, who, in collaboration with Sarovic, edits *Trace* magazine as a forum for adventurous architecture, shares Godoy's optimism. 'Chile is stable and foreign investment has led to a growth in middle-class incomes,' she says. 'Architects under 40 are winning many of the competitions, whereas before almost all the prizes went to established firms.' Winning does not guarantee building, even though Chile has been spared the recession that has crippled construction in Europe. But there is a palpable sense of optimism among architects of different generations, and they are looking forward to even better opportunities, at home and abroad.

8

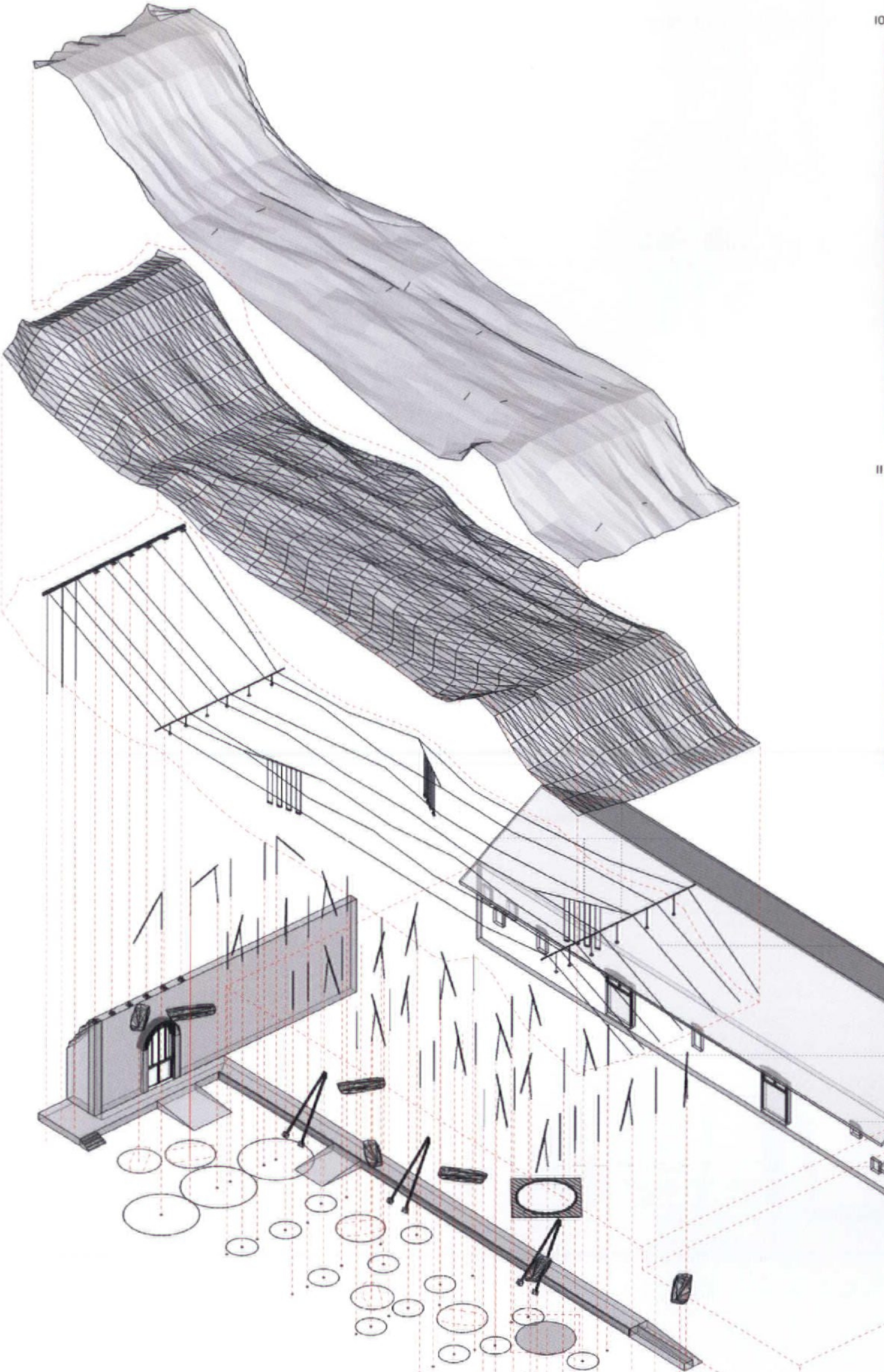


**7. Inspired by shelters for spring celebrations, Color Shadows is formed by overlaying a screen and a vibrant sheet of fabric**
**8. The wooden poles that support the canopy hold swings for children**
**9. The covered space set up within the courtyard of the Matucana 100 cultural centre**
**10 & 11. People relax in the vicinity of the raised pool in the cool shady recreational space**

9

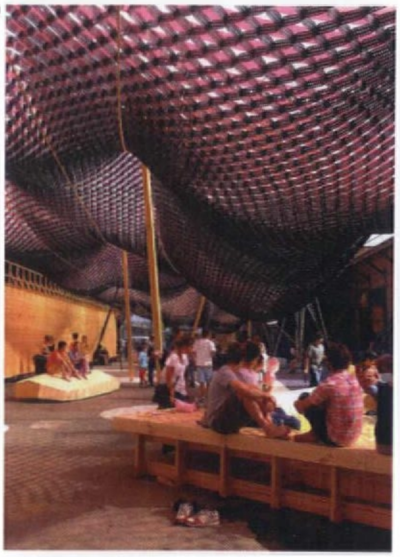


## Color Shadows, Santiago de Chile, Eduardo Castillo



**exploded axonometric drawing**

10



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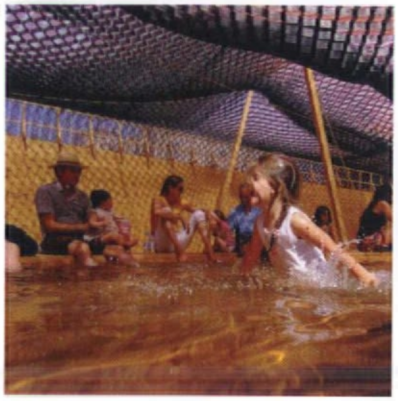

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# THE BIG RETHINK

# TOWARDS A COMPLETE ARCHITECTURE

This third campaign essay introduces Integral theory, which establishes a new framework for the design of 21st-century buildings and cities

**PETER BUCHANAN**

The first two essays in this series merely set the scene, making the case for, rather than initiating The Big Rethink: Towards a Complete Architecture. This now begins in earnest. The second essay discussed some ways in which modernism, including modern architecture, is endemically unsustainable, and some of the most potent forces bringing epochal change. It listed particularly those that might bring enticing benefits as opposed to those, in the first essay, that threaten to bring calamities. It concluded by speculating that several epochs, coexisting simultaneously over different time spans, are now ending, so highlighting just how pivotal are our times.

Here we concentrate on understanding the modern era, its origins some four to five centuries ago, and why it is now waning; the implications of that alone are vast enough. We also look at the transitions from pre-modern to modern and then to postmodern and what they meant for architecture. From these foundations we can start considering the architecture of the future, that of the epoch succeeding the transitional phase of current postmodernism – what, in the table closing last month's essay, Charlene Spretnak calls Deconstructionist Postmodernism as opposed to the Ecological Postmodernism of the emergent era.[1]

The need to rethink recalls the situation a century or so ago when architects confronted a very different pluralism to now – a riot of historic motifs and styles, sometimes within the same building. The response was to break with history and reduce to basics, tossing out historic motifs and ornament, and embracing an abstract language shaped around function and construction – and, where possible, new types of both. Now we realise this approach was too reductive and we must seek a more complete architecture informed by a more complete view of what it is to be fully human, as well as to reground both architecture and humankind in history and culture. Thus besides a new architecture we need a very different way of thinking. As the Einstein quote that is deservedly a clichéd mantra for our time asserts: 'A problem cannot be solved by the same level of thinking that created it.' Nor can the opportunities for innovation latent in the challenges we face be grasped.

This third essay introduces a new mode and level of thinking to that of modernity and postmodernity that will guide much of the argument of the future essays. Known as Integral theory, it has developed over some decades and has antecedents stretching even further back. It is particularly suited to architecture: it too brings into useful relationship many disciplines and kinds of knowledge; and because many key ideas are explained in diagrams, it should be readily accessible to architects. The core diagram, for instance, includes and brings into relationship: individual subjective experience, including aesthetic pleasure; the communal and cultural dimensions of subjective experience, such as meaning, symbolism and shared values; the objective realms of observed behaviour (function); the physical characteristics of biological form and functioning (and, for architecture, form, material, construction and so on); and the many systems in which these objective functions and forms (including those of buildings) operate – ecological, economic, technical, sociological and so on. Moreover, Integral theory is genuinely post-postmodern or trans-modern, vastly inclusive yet disciplined, so combining richness with rigour, breadth with depth, and giving equal value to the subjective and objective while also grounded in empirical evidence. It guides studies in various fields, providing a conceptual framework that stimulates new insights by highlighting neglected areas of investigation and unexplored relationships.

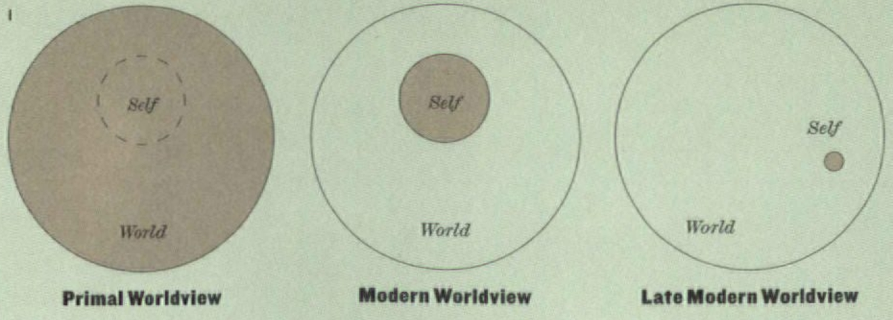
### Different sorts of Integral

That Integral theory has hardly impacted architecture to date is damning testimony to the damage wrought by the distractions of theory courses and academic publications still recycling the same irrelevant philosophical and literary theories. Because the thinking presented here moves beyond the limits of modern and postmodern thought, transgressing key taboos of the latter (particularly those of political correctness), it is only slowly entering some academic departments. Exceptions, where it has been more readily adopted, are MBA courses, which hunger for new ideas conferring competitive advantage; some psychology departments, which are home to co-developers of areas of Integral theory; and some of urbanism and ecology, which, like architecture, must integrate several fields of study.

Both confines of space – 12 essays may seem ample to rethink architecture, but there is so much to reconsider – and architecture's current detachment from leading-edge thought, limit how much and at what depth we can explore Integral theory. Parts of Integral theory require what at first brush are challenging conceptual leaps and so are not even touched upon. Let's trust our discussion is not seen as excessively trivialising by the Integral community; but then Integral theory is just too useful not to exploit, even if only in such a superficial manner.

Before introducing Integral theory let's look at some diagrams from historian Richard Tarnas. He teaches at the California Institute of Integral Studies, which was founded with similar ambitions to Integral theory, yet they are independent and somewhat different. (Integral is a current buzz word, used in various contexts, yet with not quite the same meaning.) Tarnas' diagrams summarise something of the modern predicament in a poignantly potent manner that is immediately graspable intellectually, and maybe emotionally too. They contrast the worldviews of primal, modern and late modern mankind. Although Tarnas does not define these eras exactly in the source the diagrams are taken from,[2]

1



**Primal Worldview** **Modern Worldview** **Late Modern Worldview**

**1. Diagrams by Richard Tarnas with his captions: In the primal worldview, intelligence and soul (the shaded area) pervade all of nature and the cosmos, and the permeable human self directly participates in that larger matrix of meaning and purpose within which it is fully embedded. In the modern worldview, all qualities associated with purposeful intelligence and soul are exclusively characteristic of the human subject, which is radically distinct from the objective nonhuman world. In the late modern cosmos, the human self exists as an infinitesimal island of meaning and spiritual aspiration in a vast purposeless universe.**
**2. Table of differing phases of cultural development according to, from left to right, Marshall McLuhan, Jean Gebser and William Irwin Thompson. The stages in one column are not coincident with those in the other two**

2

| | | |
|---|---|---|
| *Oral* | *Archaic* | *Culture* |
| *Script* | *Magical* | *Society* |
| *Alphabetic* | *Mythical* | *Civilisation* |
| *Print* | *Mental* | *Industrialisation* |
| *Electronic* | *Integral* | *Planetisation* |

primal refers to the vast majority of human history, those many millennia prior to civilisation, while here modern starts with monotheism and Greek philosophy, and late modern clearly is the post-Copernican, post-Nietzschean era. The diagrams are so eloquently evocative they need no more explanation than Tarnas' brief captions.

The Integral theory we will explore a tiny corner of, in a rather simplified way, is that developed by philosopher, transpersonal psychologist and prolific author, Ken Wilber. Besides Wilber's own, original contributions, he draws on and integrates the works of many other thinkers and disciplines. These range from GWF Hegel to Jürgen Habermas and include figures such as Henri Bergson, AN Whitehead and Pierre Teilhard de Chardin. Now a number of other scholars also contribute to Integral theory's ongoing evolution, not least as researchers providing a growing body of empirical evidence to expand that already subsumed in Wilber's thinking.

As implied by the name Integral, adopted from German philosopher Jean Gebser (1905–73)[3] and Indian philosopher Sri Aurobindo (1872–1950) (both among those who have most influenced Wilber), it is concerned with integrating, or at least bringing into relationship, all the rapidly expanding knowledge now available yet fragmented between specialisms. It thus helps us regain a grip on, and a sense of wholeness to, what Wilber refers to as the Kosmos, resurrecting the Greek term that refers to both the physical manifestation of the cosmos and all the forms of consciousness and culture it hosts. Significantly, then, Integral theory transcends the more limited perspective of holism (or systems holism) in attending not only to objective matters but giving equal weight to the subjective realms. Also, in developing Integral theory, Wilber sought to bring together the teachings of West and East, and so science and spirituality. Besides being an intellectual system, Wilber intends Integral theory to guide personal and spiritual development, another cause of academic resistance.

In common with some other currents in 21st-century thinking, the Integral approach is developmental in nature: beyond integrating diverse disciplines, it is concerned with how organisms, consciousness, cultures and so on evolve and develop through distinct stages. Few have problems with the notion of development in the non-human world (through insect life stages, for instance, or the branching tree of biological evolution) or even that of childhood development from infancy upwards to adolescence. But that cultures and consciousness develop through clearly demarcated phases offends many in the humanities as it transgresses postmodern taboos on ranking and hierarchy. This is despite such ideas having ancient lineage, now backed by increasing empirical evidence, as well as Integral theory's insistence that none of these phases is better or less healthy than any other. This too has caused resistance to Integral theory. But any worthwhile rethink must rattle intellectual cages, and perhaps even offend a few.

'Integral theory is concerned with integrating, or bringing into relationship, knowledge fragmented between specialisms'

Developmental theories in psychology, such as Jean Piaget's theory of child development and Abraham Maslow's 'hierarchy of needs' (and those of other more recent, but lesser known, figures such as Robert Kegan and Susanne Cook-Greuter) have shaped Integral theory. But so have theories of the development of culture and consciousness, such of those of Gebser and Aurobindo, and Spiral Dynamics, developed by Clare W Graves (1914–86) and now advanced by Don Beck and Christopher Cowan.[4] Spiral Dynamics, a model of how cultures develop through defined phases and now intrinsic to Integral theory, is richly illuminating, particularly in understanding multicultural contexts, as is often necessary in larger urban interventions. Many other thinkers have simpler yet complementary schema of historical development. Thus philosopher Marshall McLuhan saw us as evolving through and being conditioned by our communications media, and mathematician Ralph Abraham by the new form of mathematics that characterised an era. William Irwin Thompson (another thinker influenced by Gebser) prefers geo-political phases whereas Jeremy Rifkin, discussed in last month's AR, offers his own schema. For Integral theory, Gebser's schema was seminal and its stages now co-exist in it with Spiral Dynamics' more numerous ones.

Central to Integral theory, as an integrative matrix clearly communicating some core themes, is the All Quadrant, All Level (AQAL – pronounced Ahqwal) diagram. Its bare bones are deceptively simple, giving little indication of how immensely useful it is; but fully annotated with its unfamiliar terms it might seem offputtingly arcane. Wilber arrived at the diagram when working on the most important of his many major works to date, *Sex, Ecology, Spirituality*,[5] and was seeking a framework with which to integrate all the diverse developmental theories. His operating assumption was that every one of them must have some value – if only a framework could be devised to show how they relate to each other, so also highlighting relative strengths and weaknesses. He tried placing his folders of notes about each theory into piles together with others of a similar character, hoping this would reveal further commonalities as the basis for an integrative framework. But always the folders formed four independent piles with little to link them – until he recognised these as the quadrants of what became the AQAL diagram.

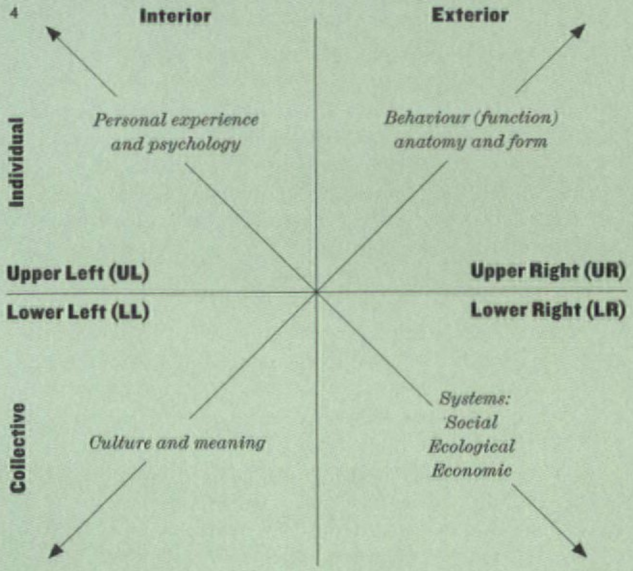
The AQAL quadrants are defined by two cross axes. The upper part of the vertical axis marks the realm of the individual and the lower part that of the collective. The left part of the horizontal axis marks the realm of interiors or the subjective and the right part that of exteriors or the objective. The Upper Left quadrant (UL) is thus interior-individual, the realm of the subjective, of psychology and intentionality, of experience and unmediated aesthetic response. The Lower Left quadrant (LL) is interior-collective, the inter-subjective realm of culture and symbolism, meaning and morals. The Upper Right quadrant (UR) is exterior-individual, the objective realm of observed behaviour and of objecthood, whether of biological characteristics or of form, matter, construction and so on. The Lower Right quadrant (LR) is exterior-collective, the inter-objective realm of systems, be they ecological, economic, technical, social or whatever. The quadrants thus also correspond to the pronouns: I (UL), We (LL), It (UR) and Its (indicating plural, LR).

The left quadrants cannot be understood by observation alone but require an interrogation of the subject to gain insight, directly or through interpretative hermeneutics, and so are dialogical. The right quadrants are studied through detached observation alone, by empirical and positivist methods, and are referred to as monological. Each quadrant has specific criteria for assessing validity and its own intellectual disciplines and associated thinkers – very few of whom develop all four quadrants. This applies to architecture too. In the UL is aesthetics and phenomenology, currently written about by Juhani Pallasmaa. LL is semiotics (Charles Jencks) and the cultural realm, including anthropology, associated with Joseph Rykwert. UR is function and ergonomics, *Neufert Architects' Data* and the *Metric Handbook*, form and construction. Kenneth Frampton's studies of tectonics is concerned with the aesthetic qualities (UL) invested by attention to this UR quadrant. The LR quadrant of systems is the realm of contracting, industrialised systems, returns on investment and so on. Obviously any truly complete form of thinking would give attention to all quadrants, to the subjective left as well as the objective right. Systems holism, which many see as the paradigm succeeding modernity, deals with right quadrants only – and so, as we shall see, is a limited modern mode of thought.

3

| | **Interior** | **Exterior** |
|---|---|---|
| | *Left-Hand Paths* | *Right-Hand Paths* |
| | **Subjective** | **Objective** |
| **Individual** | *Truthfulness* | *Truth* |
| | *Sincerity* | *Correspondence* |
| | *Intergrity* | *Representation* |
| | *Trustworthiness* | *Propositional* |
| | **I** | **It** |
| | **We** | **Its** |
| **Collective** | *Justness* | *Functional Fit* |
| | *Cultural Fit* | *Systems Theory Web* |
| | *Mutual Understanding* | *Structural-Functionalism* |
| | *Rightness* | *Social Systems Mesh* |
| | **Intersubjective** | **Interobjective** |

4

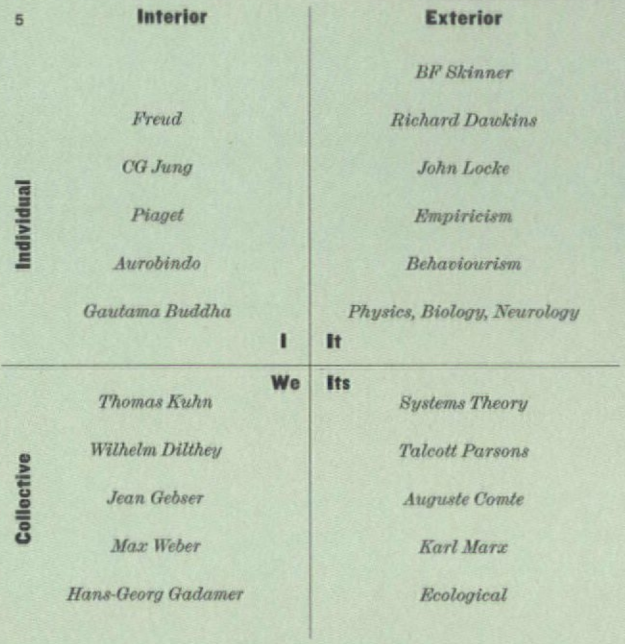


Each AQAL quadrant is bisected by a diagonal line marked at regular intervals. These denote the levels that rise with distance from the crossing of the axes, so introducing the developmental dimension. The levels are too complex to detail in a single essay, but crucially are organised 'holarchically'. Holarchy derives from 'holon', coined by Arthur Koestler to denote something that is a whole in itself but also part of a larger whole. Thus, to progress up the levels with an example from the UR quadrant, an electron is a whole that is also part of an atom, and an atom is a whole that is also part of a molecule, and a molecule is a whole that is also part of a cell, that is a whole and also part of an organism and so on. The Integral term for holarchical organisation is 'transcend and include' in that each level both transcends that below and includes it. An anomaly in some depictions of the AQAL diagram, and in our use of it to discuss architecture, is that some things depicted in the right quadrants, particularly the LR, are artefacts (human-created) rather than holons (the products of evolution). But this in no way impairs the usefulness for those seeking insights into creating better architecture through greater inclusiveness (checking all quadrants are considered) and increased rigour, even if not quite the ultimate in methodological rigour.

Among the key assumptions informing, and insights arising from, the AQAL diagram is that a progressive increase in level in one quadrant is matched by a similar rise in each of the others. Hence an increase in complexity of brain physiology (UR) is matched by an increase in

**The AQAL quadrants derived from Ken Wilber's *Brief History of Everything***
**3. Simplified AQAL diagram defining the quadrants**
**4. Each quadrant has its own specific criteria of validity**
**5. Some thinkers representative of each quadrant**

5



consciousness (UL), as well as in cultural sophistication (LL) and social organisation (LR) and these all come about simultaneously. Such understandings are crucial if we are to progress to sustainability. At the moment this tends to be treated as largely an ecological issue (LR) to be tackled with attention to behavioural and technical matters (UR). Neglected are the left quadrants, although effective action in the right quadrants depends on left-quadrant empathic understandings and motivation as well as cultural transformation.

Although we lack space to recap Integral theory's sophisticated models of psycho-spiritual and cultural development, these can be broadly distilled into four key stages: ego-centric (concern with the self); ethno-centric (that progresses from concern with the tribe to the nation-state or race); to world-centric (when sustainability becomes a live issue); to biosphere-centric (that brings the vision to inspire effective remedial action). Thus for Integral thinkers, right-quadrant measures to achieve sustainability, no matter how useful, must be accompanied by left-quadrant development. When radical reorientation is urgently required, as now, this insight should inform the revision of education and also the work of artists and architects whose proper role is not spurious self-expression but contributing to the development of consciousness and culture.

The levels in the AQAL diagram highlight an error in thinking common in contemporary culture, what Integral theory labels the Pre-Trans Fallacy. In this, lower states of experience or cultural development (whether infantile or pre-modern and earlier) are mistaken for higher (Transcendent) ones evolved beyond current norms. Thus Freud dismissed higher levels of spiritual development (Trans) as regression to infantile states of still undifferentiated union with the world (Pre), while Jung often mistook the latter (Pre) for higher mystical levels (Trans). For Wilber, many 'deep ecologists' who advocate empathic union with the Earth and its creatures, are guilty of the Pre-Trans Fallacy by advocating regression to an earlier state of undifferentiated union rather than forward progression to where this union is re-achieved at higher levels of consciousness, culture and cognition. This is a trap that some architects advocating a 'biophilic' architecture, or more extreme back to nature approaches, need to be alert to and avoid.

### From pre-modernity to modernity

Even from this brief and very partial description of the AQAL diagram it should be clear how potently useful it is in ensuring a more complete approach to architecture than that characterising modernity, which focused primarily on the right quadrants at the expense of those on the left, ignoring the LL in particular. But Wilber also uses the AQAL and related diagrams to quickly illuminate historic transitions, particularly those from pre-modernity to modernity, and then from modernity to postmodernity. This deepens our understanding of these eras and gives telling insights into their architecture.

All pre-modern cultures subscribed to a worldview often called the 'Great Chain of Being'. This can be represented diagrammatically as a series of concentric, or nested, circles. In its simplest form the central circle denotes matter; the one around it, organic life or the body; the next, mental activity and the mind; and the outer circle or circles, the soul and spirit. The terminology differs between cultures and religions, but the schema is identical. Such a worldview conferred a sense of organic unity to these pre-modern cultures that many now look back to with nostalgic envy. But from the modern perspective this worldview and the tight entanglement of its layers is also very constrictive, as Galileo found when his investigation of the stars (the inner circle of matter) was deemed to transgress religious edict (the outer circle of spirit). In such a context it is difficult to develop ideas in isolation and depth; and the only notion of evolution conceptually possible is up through the circles or levels, rather than within, say, the second circle of life, as with Darwinian evolution. In-depth investigation of a single layer only became possible with modernity.

The Great Chain of Being was the worldview up to and through the Middle Ages until the beginning of the Renaissance when faith as the underpinning of culture gave way progressively to reason. Various thinkers have chosen different events as marking the earliest stirrings of modernity. Examples that readers might be familiar with are Petrarch's ascent of Mount Ventoux in 1336, simply to get a better view (perspective on) the surrounding

'An assumption informing, and insight arising from, the AQAL diagram is that increases in level in one quadrant are matched by rises in the others'

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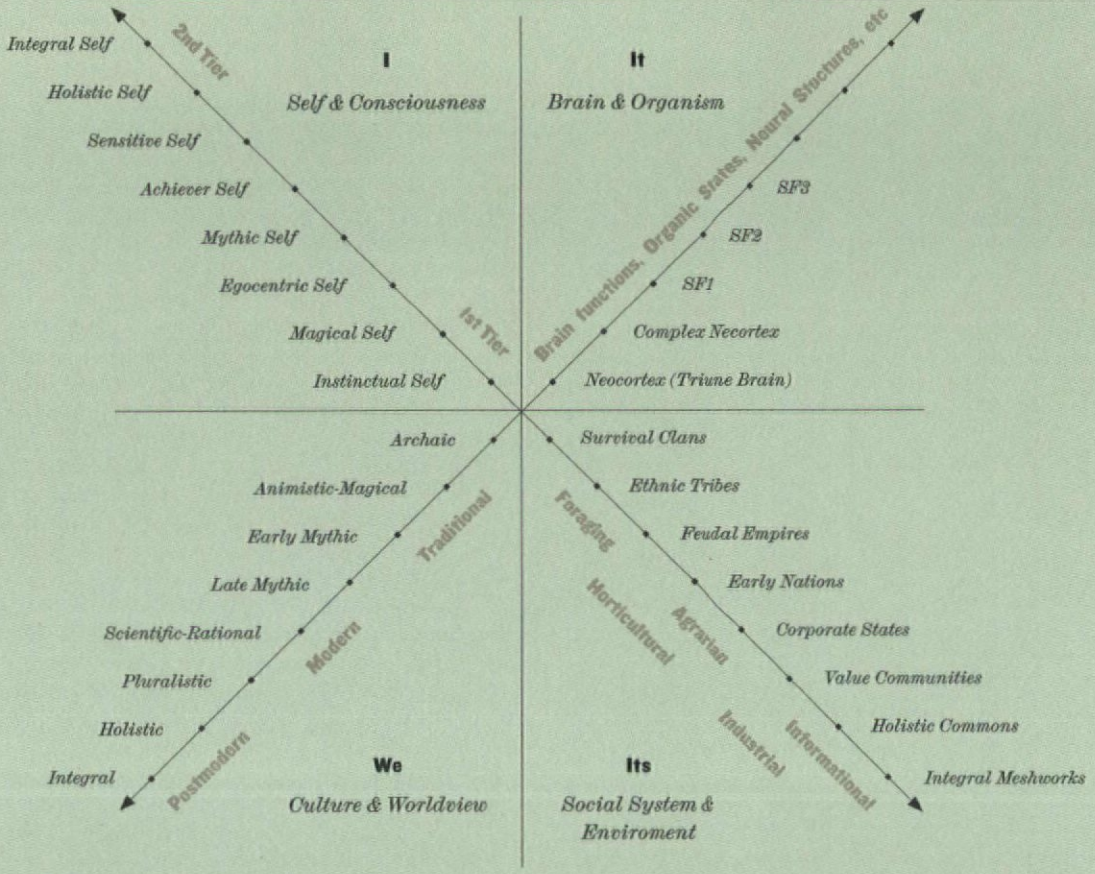

**6. The four quadrants as applied to humans**
**7. University departments arranged by quadrant. Diagram derived from *Integral Ecology* by Esbjörn-Hargens and Zimmerman**

countryside, which some see as presaging Filippo Brunelleschi's demonstration of perspective in 1413, after which, it is argued, objects became progressively more distinct from their background. Possibly most important of all were Johannes Gutenberg's invention of the printing press in 1439, which made books relatively affordable; and the Fall of Constantinople in 1453, which led to fleeing scholars bringing by-then forgotten Greek texts to Italy, so leading a rediscovery of its philosophy with its emphasis on reason.[6] Remarkably prophetic about the nature of modernity was the 23-year-old Giovanni Pico della Mirandola's extraordinary *Oration on the Dignity of Man* of 1486, envisioning a new sort of human, capable of understanding God's works and free from the limits constraining all other creatures. Also seminal was Nicolaus Copernicus' publication announcing the heliocentric nature of the universe in 1543. Today we see this as displacing us from the centre of the universe and so as somewhat marginalising mankind. But its immediate impact was the contrary: elation that in discovering and formulating the laws of God's universe mankind was itself, though to a lesser degree, demonstrating God-like powers. None of the above alone initiated modernity; yet all contributed and helped shape its essential character.

But to return to Wilber: for him a key step to modernity is what he refers to as 'the differentiation of the Big Three' – the True, the Good and the Beautiful. These were differentiated already by Plato. But with modernity the differentiation was eventually to become more extreme and led to dissociation between the Big Three and all the forms of fragmentation that characterise modernity. The Big Three correspond to the quadrants: the True, which includes nature and science, being UR and LR; the Good, which includes culture and morals, being LL; and the Beautiful, which includes art and aesthetics, being UL. From this differentiation came the power of modern thought and its incredible mastery of the material world, particularly as the True in the form of science was now set free to develop unhindered.

The re-ascendance of reason led initially to a flowering of both the left-hand quadrants in Humanism and the beginning of the long ascendance of the right-hand quadrants of science and technology. As the latter

'The core determinant of the character of an era is its underlying notion of reality. For modernity this notion is that there is an objective reality, external to and independent of us' increased in its very demonstrable powers, this led to a slow but steady devaluing of the left-hand quadrants as Humanism withered into the humanities, the last refuge of the subjective. It also resulted in CP Snow's 'Two Cultures', of science and the arts, that neither talked to nor understood each other. Eventually, what had been a potently useful and healthy differentiation became too extreme, a pathological dissociation in which links among the Big Three were severed, so leading to the fragmentation and intensifying the disenchantment of the world so eloquently summed up in Tarnas' diagrams.

The core determinant of the character of an era is its underlying notion of reality – and the mostly unquestioned assumptions it results in that condition people's understanding of and experience of the world. For modernity this notion is that there is an objective reality, external to and independent of us. Baldly stated, this might seem relatively banal and inconsequential. But the consequences of adopting this historically unprecedented sense of reality were vast and still continue, explaining much about both modernity and modern architecture. Prior to modernity, the notion of an objective, independent reality was inconceivable: you were an engaged participant in reality to which you were responsible because it was, in small part at least, shaped by your actions and thoughts. Rituals were needed to ensure rains and harvest, even in some cultures to ensure the sun rose. You were immersed in and intrinsic to reality and the world – even if your powers over them were very limited and had to be reinforced by constant ritualistic entreaty.

Increasing numbers now profess New Age beliefs such as that we create our own reality as a mirror of our thoughts. They and others claim science, by discovering the participative role of the observer in quantum mechanics and phenomena such as quantum entanglement, has disproved the notion of objective reality. There is truth in these views, but the problem is less with the idea of an objective reality – which despite what scientistic fundamentalists claim will always remain to some degree unknowable because inevitably conditioned by the limits of the subjective observer – but rather that this reductive right-quadrant view became modernity's dominant and often exclusive view of reality. (Postmodernity was in part provoked as the antithesis of this view.) Immeasurably compounding this problem is the idea that the reality of things can be fully understood by reductive analysis of them abstracted from context. Here it is the newer sciences of ecology and New Biology, of systems and chaos theory, and complex adaptive systems that challenge this view by insisting that things can only be fully known in their wider webs of relationships.[7] Even more challenging in the New Sciences is the increasingly subscribed-to view of a living universe and some heretics arguing consciousness as fundamental to the universe.

Modern science and scientific materialism, the concomitant mode of thought virtually synonymous with modernity, study this objective reality through detached observation, measurement and reductive analysis – as has proved hugely effective. But detached observation also supresses our emotional and empathic connections with

7

| | **Interior** | **Exterior** |
|---|---|---|
| **Individual** | *ARTS:*<br>*English*<br>*Screenwriting*<br>*Music composition and performance*<br>*Studio Art (painting, sculpting, photography)*<br>*Theatre and Dance*<br>**I** | *NATURAL SCIENCES:*<br>*Biochemistry*<br>*Biomedical Engineering*<br>*Cell and Molecular Biology*<br>*Chemical Engineering*<br>*Psychology*<br>*Physics*<br>**It** |
| **Collective** | **We**<br>*HUMANITIES:*<br>*Anthropology*<br>*Classical Studies*<br>*Cultural Anthropology*<br>*Literature and Languages*<br>*History*<br>*Philosophy* | **Its**<br>*SOCIAL AND SYSTEMIC NATURAL SCIENCES:*<br>*Business*<br>*Ecology and Evolutionary Biology*<br>*Economics*<br>*Civil/Environmental Engineering*<br>*Astrophysics and Astronomy*<br>*Political Science*<br>*Sociology* |

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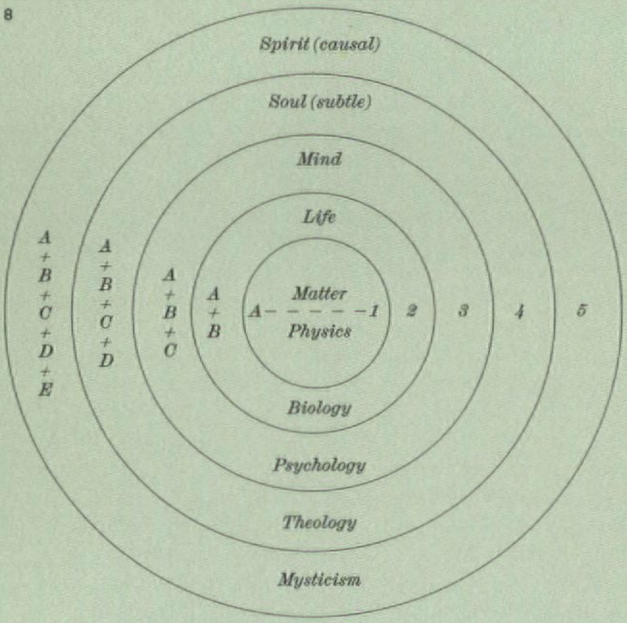

8. The nested circles of the Great Chain of Being that represents the worldview of all pre-modern cultures

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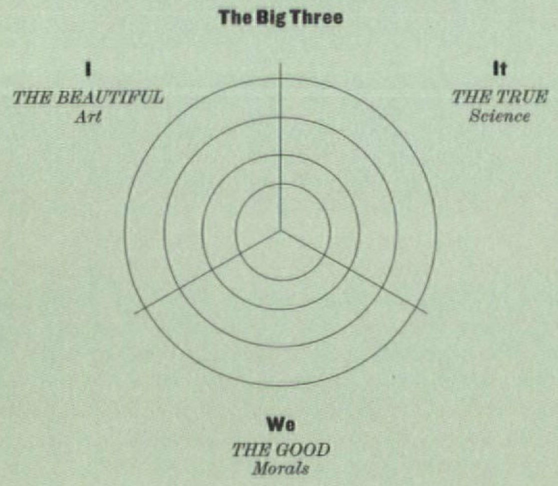

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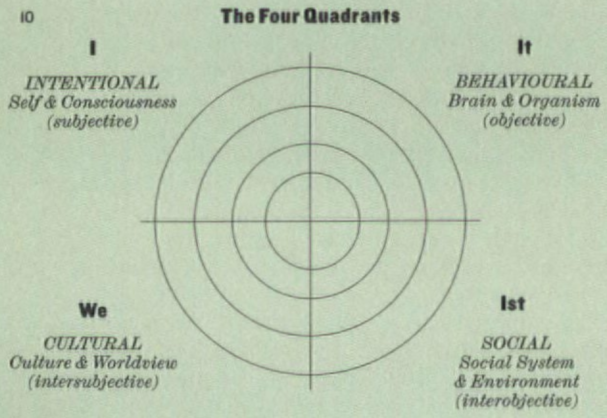


9 & 10. The Big Three correlated with the four quadrants

the object observed and the world at large, so deadening us to tolerate experiments on other species and the exploitation of nature. These have become mere resources or commodities, and desperately undervalued ones. Science and the right quadrants, the only reality knowable with any certainty to the modern mindset, also came to progressively dominate, even suppress, the left quadrants of consciousness and culture; as for soul and spirit, along with religion, they were dismissed as mere superstition. Behaviourist psychology even rejected the notion of consciousness, which many others correlated as mere brain function, observable electric activity and an almost accidently emergent epi-phenomenon, so collapsing the rich worlds of the left quadrants to the bio-mechanics of the right. Such reductionism is characteristic of modernity.

In Integral terms, the result is Flatland, a narrow and desiccated reality that excludes the sensual joys of embodied experience, along with psychological depths and spiritual heights. Also excluded are all the dimensions of meaning invested by the left quadrants, so intensifying the loss of meaning arising from living in Newton's dead, mechanical universe where even evolution is the blind product of chance mutations and natural selection.

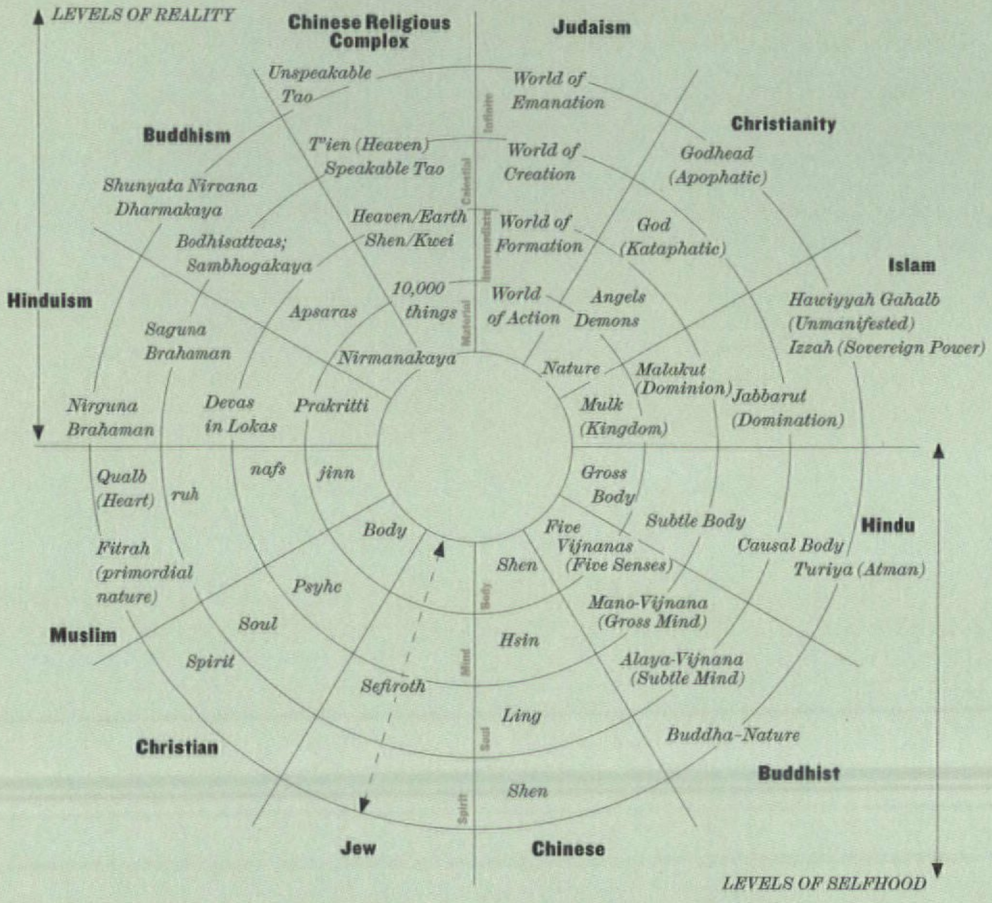
Objective reality explored by reductive analysis dissolved the sense of intellectual and experiential connections and relationships between things, and even between people. This led inevitably to the fragmentation of the world into isolated objects, as evidenced by the buildings in the modern city, to social atomisation, the rise of individualism and erosion of community – and again to the reduction of the natural world and other people to resources to be exploited. Compounding this, detached observation privileges the distancing sense of sight, further eroding emotional and empathic engagement. Moreover, sight tends to emphasise surfaces at the expense of seeing into things, also eroding meaning, and is well exemplified in the emphasis on the facticity of the medium in modern art, in painting, for instance, on the picture plane and the materiality and visible working of the pigment.

Hugely pernicious is that in living with only an objective reality, we are excluded from this reality, reducing us to observers and consumers, alienating us and shutting us out of the world, giving rise to a widespread sense of not being at home in the world, of merely camping or picnicking on it. Such feelings are compounded by the notion that this is a meaningless and dead clockwork universe. Little wonder people care so little about the environment and wall themselves off from reality and the world with addictive behaviours, such as shopping and the accumulation of goodies, as well as with television, muzak, air-conditioning and tinted glass.

### Modernity's unsustainability

Many cultures prior to modernity employed unsustainable practices. But they lacked the technological power to do much damage or it was only a single culture and its natural habitat that were destroyed, the latter often to recover in time. But with modernity it is all cultures that are threatened, even those most remote from civilisation,

11. The Great Nest of Being as correlated with levels and their terms in the different religious traditions. Diagram derived from one by Brad Reynolds



and the whole planet, although it too may recover eventually. The many ways in which modernity is utterly unsustainable should now be obvious, so here we only recap a few of them. The power of its left-quadrant science and technology led to the suppression of right-quadrant felt connections (empathy) with the planet and nature and exacerbated a hubristic denial of any dependencies on them. These became a mere dumping ground for externalities (such as pollution and waste) rather than treated with measured respect – for its regenerative cycles, for instance – let alone being treated with left-quadrant reverence. Modernity simply exploits and seeks power over nature rather than seeking any symbiosis with it, or 'transcending and including' it as part of an Integral culture that recognises it evolved, rather than is separate, from nature – and thrives and is healthy only to the degree nature does too.

Probably the most deleteriously unsustainable aspect of modernity is in the psychic costs of devaluing the left quadrants of psychic depths and spiritual highs, of empathic connections to others and nature, and of a richly supportive culture that gives meaning and dignified purpose to our lives while guiding our flowering into full humanity. Denying and detaching, and often causing us to betray our deep personal values, we cannot find peace of mind, fulfilment or profound contentment. Robbed of these deep and grounding satisfactions, including the sense of being at home in the world, we are left lonely and isolated, rootless and restless, and prey to the addictive and destructive behaviour that is much in evidence all around us. Once again this reasserts that sustainability cannot be achieved without confronting the exciting, collective challenge of applying visionary imagination to cultural transformation. Among other things this must urgently raise much of the population from ego- and ethno-centricity to world- and biosphere-centricity – a challenge when in even in the developed world a decent quality of life is not available to a sizeable minority.

Of course, besides the downsides we are increasingly aware of, modernity also brought huge gifts, including almost everything that surrounds the modern citizen and makes for a healthy, long and comfortable life, secure in all the slowly-won rights we now take for granted. Instead of only castigating modernity, as so many environmentalists do, we should acknowledge the debt of gratitude we owe it, not least because, as psychotherapists have shown, it is gratitude not blame that releases us and allows us to move on. But the better we understand modernity, the more inevitable seems the eventual emergence of postmodernity. Yet its current form (Spretnak's Deconstructionist Postmodernism) is only be a transitional phase, useful in eroding the hegemony of the modern worldview and opening us up to new perspectives, yet unable to usher in the next major epoch.

As with modernity, postmodernism's beginning is impossible to pinpoint. It was presaged by the emergence of perspectives repressed by the hegemonic, masculinist, instrumental views of rational scientific materialism. Two were particularly important, the voices of the colonised and those of women. Both announced ways the left-quadrant, interior realms were repressed by right-quadrant rationality. Initially the response was 'to just be reasonable, or rational' so denying feelings – of resentment, anger, injustice – accumulated from collective history and personal experience. Patronising rationality is a pervasive modern form of violence, the velvet glove hiding modern forms of barbarity, whether the victims were the colonised, women, nature or manmade heritage. (Women writers had also first alerted us to two other major forms of destruction wrought by right-quadrant rationality: Rachel Carson to nature in *Silent Spring* and Jane Jacobs to the city in *The Death and Life of Great American Cities*.) Also asserting the left-hand interior quadrants was increasing interest in philosophies attending to private experience: Existentialism, which expressed the alienation wrought by modernity; and, of greater long-term consequence, the phenomenology of thinkers such as Martin Heidegger, Maurice Merleau-Ponty and Gaston Bachelard.

Besides, culturally, modernity was doomed to failure, for reasons other than the devaluing of culture and the inner subjective worlds it speaks to and develops. As the concept of the Great Chain of Being makes clear, all pre-modern cultures are rooted – or perhaps, as more consistent with the diagram, wrapped – in a religious or spiritual worldview. Once reason had brought about Nietzsche's 'Death of God', modernity was robbed of this deep wellspring, and art had to step into its place. This led to great flowerings of art right up to the early modern artists and writers of the first half of the 20th century. But art alone cannot underpin culture, especially when cut off from the history of culture, and so became progressively trivial.[8]

A clear, simple and useful understanding of postmodernism is as the re-emergence of the repressed flipside of modernity, the pendulum having swung too far in the opposite extreme from modernity's objective reality (right quadrants only) to posit all realities as arbitrary (left quadrants only), at best consensual constructs we can momentarily agree on. Hence postmodernity's ultra-relativist stances: all ideas and opinions are equally valuable – and challenging anybody's provokes aggressive narcissistic regression. Its great weakness is less in stressing the left quadrants than its lack of any grounding. It rejects the right quadrants (even science is just another narrative) and the deep subjective with its archetypal layers of the left quadrants, as revealed in depth psychology – as well as, Wilber would say, the universals found in higher levels of spiritual development.

Historically, postmodernism is an important corrective to modernity. Sensitive to the values of the LL quadrant, it lacks the latter's destructive drive and is more conservationist towards the built and natural environment. It also highlights, for instance, the importance of context in determining validity and value, and gives space to multiple voices and viewpoints so eroding the simplistic certainties of modernity and facilitating the transition to the next epoch. But it is a transitional phase and not the next long-term paradigm. Moreover, postmodern thinking is now a serious liability. Rejecting hierarchies, it cannot prioritise; rejecting grand narratives and big picture thinking, it lacks much-needed perspective, so blocking consideration of and action on critically urgent issues. After all, evolution and ecology, sustainability and the new visions emerging from science, such as that of the cosmic unfolding, are all very grand narratives.

'Modern architecture and urbanism created the city of doing as opposed to the city of being, where different roles are played out in different places'

Even the tolerant relativism that is part of its 'caring and sharing' ethos is problematic, leading to endless discussions and further frustrating any effective action. So while academe and the civil service are full of postmodernists, some businesses use psychometric testing to screen them out from applicants. The lingering tenacity of postmodern thought, particularly in academe, is exactly analogous to Scholasticism at the close of the Middle Ages, arguing angels dancing on pinheads and oblivious to the burgeoning Renaissance. Even the urgency of global warming has failed to break postmodernism's dalliance with frivolous theory. Nor, curiously has the financial crisis: as slippery constructs ungrounded in larger realities there is little to choose between bankers' derivatives and the writings of Jacques Derrida.

### Architectural consequences

So how are the differing notions of reality that underpin modernity and postmodernity reflected in the architecture of each era? The settlements and cities of the pre-modern world clearly convey the Great Chain of Being's sense of organic wholeness. Architecture being, rightly, a relatively conservative pursuit, it would take centuries before the built environment fragmented in the extreme manner associated with the 20th century, as is entirely consistent with modernity's notion of an objective reality and the prioritising of reason. The progression of styles from the Renaissance onwards can be seen as series of attempts to reassert some notion of the rational, with less rational interludes. Thus with Renaissance Humanism, mankind whose reason had unravelled the mechanics of God's universe, was elevated to the status of 'Man the Measure' at the centre of an architecture of controlled composition and harmonious rationalised proportion. Later, Neo-classicism, reacting against the 'illusionism' of Baroque with classical reverence for 'truth and reason', reasserted a more mechanically rational order, particularly in JNL Durand's modularised classical components disciplined by mechanical grids. Retrospectively, this architecture came to be known as

Structural-Rationalism and its ideals were to influence proto-modernists such as Auguste Perret. And although Neo-Gothic was a Romantic reaction against the rationality of Neo-classicism, it too asserted its own form of structural-rationalism in truth to materials and honestly expressed structure.

It was only in the Heroic Period and the International Style that modern architecture exactly exemplified the modern paradigm. The erosion of intellectual and experiential connections accompanying the notion of an objective reality led to buildings as freestanding objects shaped around their internal workings and constructional assembly. Such buildings do not respond to context, local culture or even climate. They also neither contain nor positively shape urban space so that cities fragment into a collection of isolated object buildings. Privileging the right quadrants reduced the complexities of dwelling – a word resonant with left-quadrant psychic experience and meaning – to mere function, behaviour understood by detached observation. Attention went on what could be measured – ergonomics, furniture placement, space to circulate – at the expense of what is more difficult to measure, such as how the spaces between buildings are used – hence the many housing schemes with good dwelling units and dangerously undefined public space that soon became no-go areas.

Suppressed were elements that conveyed meaning and connection to the long narratives of culture and history, such as familiar rhetorical devices (pilasters, ornament and so on), and those that suggested the human body (like columns and vertical windows), and which helped people relate to the buildings. Privileging sight over the other senses further deprived the buildings of any experiential richness, leading to the insubstantial thinness and featureless flatness of modern construction, its lack of hapticity, sensual materiality and detail that might engage the body and hand. Maybe worst, the rhetoric of utilitarian economy and efficiency was lapped up by speculators and government agencies who used it justify the most squalidly mean-spirited, lowest-common-denominator construction imaginable, much of which quickly turned into dirty and dangerous slums. All this is profoundly dehumanising, yet initially mistaken for the opposite.

There are psychic costs to such buildings and the faceless, placeless cities they create. People find them alienating and do not feel fully at home in them, although this was dismissed as irrational nostalgia. But it was rationality taken to an extreme that became irrational, just as efficiency taken to a narrow extreme became very inefficient in other ways. The fragmented city also fragmented communities and psychic lives. Modern architecture and urbanism created the 'city of doing' as opposed to the 'city of being', a city where different roles are played out in different places, such as employee at work, parent at home, fan at the stadium, and commuter who traverses the spatial and experiential void in between. But we only know ourselves to the degree that we are fully known by others, and with the dispersal of the city of doing few are known intimately for who they really are in all their roles and facets. Without this and the inevitable exposure of self-delusion we stay stuck in

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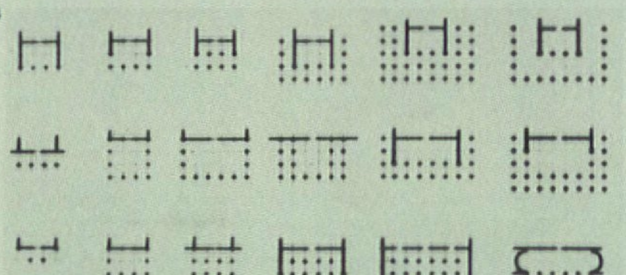

**12. Renaissance Humanism expressed in architecture. The Pazzi Chapel, Florence, by Filippo Brunelleschi 13. Neo-classical reworking of Rome's Pantheon by Thomas Jefferson at the University of Virginia 14. JNL Durand's mechanically modular Neo-classicism, showing variations on themes with modular components disciplined by grids**

a series of fantasy selves and miss out on the benefits to self-knowledge and psychological maturation. How different this is to the traditional city of being with its continuous and enveloping urban and social fabric in which you feel at home, and are continuously drawn into relation with your setting and its occupants, making it more difficult to live as fantasy selves.[9]

**Modernity and anti-modernity**

Alert readers will protest that this characterisation of modern architecture is a caricature – although the characterisation of the resulting urban fabric, or rather lack of it, is generally all too true. Sadly, it is too, in some degree, of most modern buildings. But it is impossible for architects to entirely suppress their humanity and left-quadrant concerns (particularly UL aesthetic ones) inevitably crept in; the work of the best of today's mature architects, who remain true to many modern ideals while also fully aware of and addressing most of its failings, is quite different. But so too was the architecture of those few masters of early Modernism, particularly figures such as Frank Lloyd Wright and Le Corbusier (both, admittedly, disastrous urbanists). It is pertinent that we understand why.

An obvious reason is that these figures belonged to that last generation thoroughly educated in western classical culture. They knew their history – including of literature, art and architecture – the Bible, the Greek and other myths. A problem in writing about them today is that so much of this must be explained to better understand the works. With a figure like Le Corbusier, this requires explaining the occult: his later works are steeped in alchemical and astrological symbolism – although in this he was extreme rather than unique. Even his self-invented name, Le Corbusier has deliberate echoes with le corbeau (the crow) and so of the raven that is the avis hermetis of alchemy, transforming matter into spirit (a wonderful metaphor for the architect) and Corvus, the nearest celestial constellation to Libra, his birth sign. But then, remember the architect's training, the Masonic tradition had been largely about initiation into occult traditions. For figures like Le Corbusier, the occult was a distillate of ancient and historic wisdom and culture. Besides, the occult is about reading meaning into form and pattern – another marvellous metaphor for an architect. So when Le Corbusier said the roof of Ronchamp was inspired by a crab shell, he was actually alluding to the symbolism of Cancer (the Crab), the astrological sign of the mother principle. (The church is dedicated to Mary, Catholicism's mother archetype, and, for Le Corbusier, to his mother.) The glyph of Cancer (69 laid on its side), recurs in the plan as a tiny portion of the many levels of esoteric symbolism pervading this and other late Le Corbusier works. It was grappling with and synthesising such high and diverse ambitions, of all sorts not mentioned here, that gave these works a depth and intensity that you respond to even without knowing about such things.

For Wilber, today's postmodernism is the third wave of anti- or postmodernity. The first two were Romanticism and Idealism. Appalled by industrial modernity's destruction of the landscape and the dehumanising

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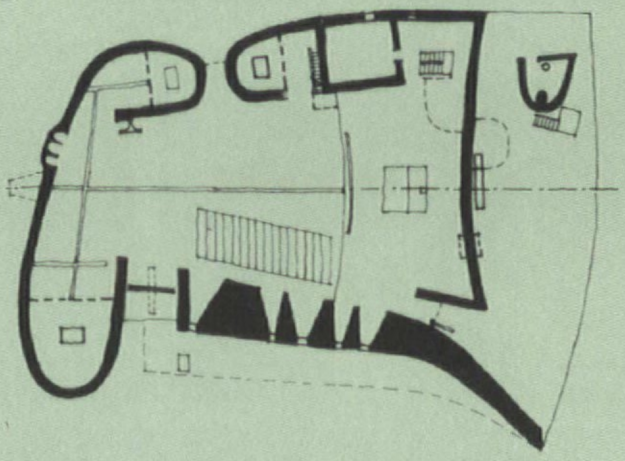

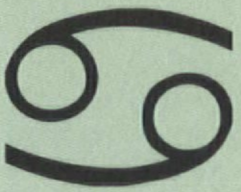

**15. The masters of Modernism did not conform to reductive notions of modern architecture. Le Corbusier's plan of Notre Dame du Haut, Ronchamp, has deliberate echoes of the astrological glyph of Cancer, shown below**
**16. Unlike the typical International Style building, Frank Lloyd Wright's Falling Water is embedded in nature and specifics of its site**
**17 & 18. Like many of Le Corbusier's late works, the Ronchamp chapel has deliberate echoes of Neolithic sacred constructions, including dolmen**

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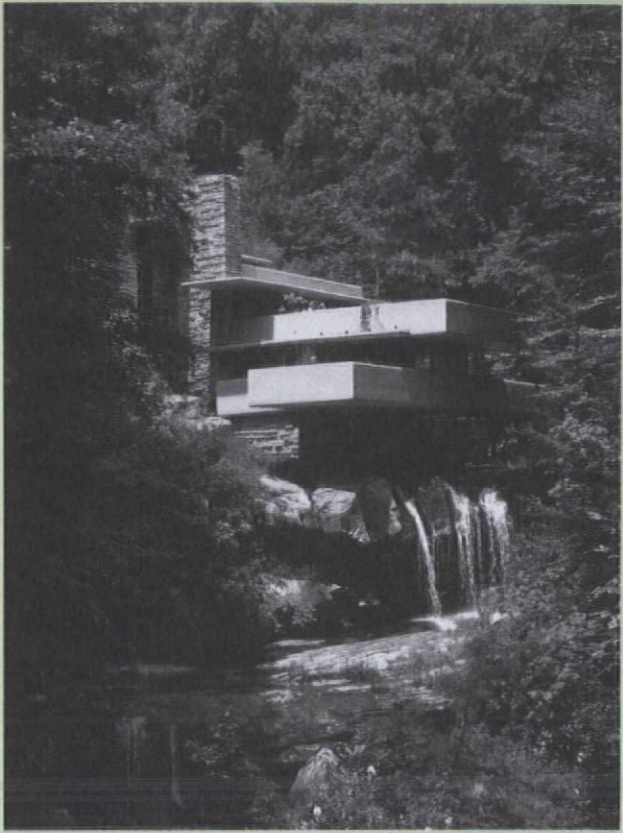

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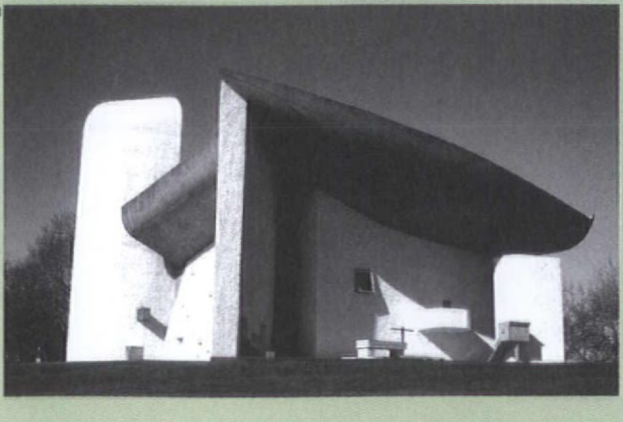

degradation of its labour force (William Blake's 'satanic mills'), as well as the right-quadrant crushing of the human spirit, Romanticism sought an alternative in the glorification of nature. In simplistic terms, Wilber's critique is that the Romantics mistook left-quadrant culture to be separate from and the antithesis of right- quadrant nature, although it had evolved from, and so is an intrinsic part of, a less reductionist vision of nature. Hence the Romantic worldview was fundamentally the same as that of scientific materialism. Instead of such dualism (another characteristic feature of modernity), they should have sought a unifying, left- and right-quadrant, vision of a culture that 'transcends and includes' nature. His critique of many current environmentalists is the same. He is more sympathetic of the Idealists, but the argument is not germane to our purposes here.

Although Wilber does not argue this, the greatest of the early modernist artists and architects can also be usefully seen as the third wave of anti- or postmodernity, as can, to a lesser extent, other figures. James Joyce, TS Eliot, Ezra Pound and Igor Stravinsky clearly do not conform to any reductive modern paradigm. The concerns of giants like Frank Lloyd Wright and Le Corbusier clearly fall into all four quadrants and in some ways they are as much anti-modern as moderns – most obviously post-Second World War Le Corbusier with his evocations of ancient architectures, including the Neolithic, and rough physicality that was for the whole body to identify with and not only the eye to glide over. Both architects revered nature and Wright was very much concerned with intensifying a sense of place while fitting into nature. But then both have deep roots in Romanticism, particularly John Ruskin; Frank Lloyd Wright was also influenced by American Transcendentalists such as Ralph Waldo Emerson, and Le Corbusier by various anthroposophical writers. So both were concerned with spiritual matters, as was Mies van der Rohe, as evidenced in a brilliant study by Thomas Beeby in the magazine *Threshold*,[10] who was rooted in German Romanticism, in the architecture of Karl Friedrich Schinkel and the painting of Caspar David Friedrich. In the latter's sacramental vision, every element is given equal weight and is equally pregnant with immanent spiritual significance; something similar applies with Mies' architecture in which components do not fall into classical hierarchies. (His comment 'God is in the details' was meant much more literally than is recognised.) Again, it is from such deep grounding in the left as well as right quadrants (all these architects were passionately interested in technology, materials, construction and so on) that comes the depth of their architecture that none can match today.

Current postmodernism in architecture was preceded by the call to loosen and expand modernism's reductive and abstract vocabulary in Robert Venturi's Complexity and Contradiction in Architecture, as well as by Pop Art's celebration of commercial vulgarity that inspired Learning from Las Vegas. Generally forgotten now was the return of the subject to architecture in the writings of Aldo van Eyck, evoking homecoming and the experiential dimensions of the threshold, as well as others. Important too was an enthusiasm for the phenomenological writings of Gaston Bachelard, and only later did a few turn to some of the postmodern philosophers. Louis Kahn's example was also important both in talking about the initiating spirit of a design and in an architecture that evoked archaic roots.

But somehow the promise latent in these sources never flowered. As with postmodernity in general, postmodern architecture is best understood in terms of the pendulum having swung too far to rest in the left quadrants exclusively, into an arbitrary reality – all is artifice – and ungrounded subjectivity. It expects to create its own reality in theories and concepts, scenarios and narratives – the attitude often seeming to be that the more spurious or obfuscatory these are, the better – which buildings then illustrate, or 'represent'. Thus what many think of as postmodernism, the collaging of historic motifs, or 'quotes', on what are otherwise banal modern buildings, so, (the theory goes) rendering them populist, is only one sort of postmodernism. The arch postmodernists are really figures like Eisenman and Tschumi, constantly elaborating and illustrating some theoretical position. Idea generally trumps reality, which is why many postmodern buildings seem built of crud (remember the plasterboard early works of Eisenman and Graves) and they are generally crude and unconvincing as construction. Even when well made, materiality and detail does not advance and help you engage with the design, although it might make for interesting episodes – as in some Koolhaas/OMA works, where these tend to erode rather than advance the originating concept. Much postmodern architecture has strong parallels with Conceptual Art, once you have got the idea there is nothing more to engage you. Postmodern architecture seems too silly an enterprise, some of its characteristic buildings too ineptly preposterous, to go on much longer. That is still persists reflects the pernicious influence of theorists incapable of architectural judgement as well as the confused state of architecture that prompted The Big Rethink.

Even this mere introduction to Integral theory sheds significant insights into modernity, postmodernity and their respective architectures. Implicit is that the Integral approach is among the most promising routes to resolving the impasses that currently stymie us; not least it could inform a left-quadrant, cultural vision properly grounded in right-quadrant empirical realities inspiring enough to motivate effective collective action. This culture will not be the antithesis of nature, as assumed by the Romantics, but rather will transcend and include nature from which it emerged as part of evolution. Admittedly the notion that the noosphere, the realm of mind and culture, transcends and includes the biosphere, the realm of nature, is mind boggling on first acquaintance, and inflammatory to 'deep ecologists'. But gaining such insights is the benefit of pursuing Integral theory further than here.

The AQAL diagram also helps gain critical leverage to assess the proliferation of pluralist approaches in current architecture. The best current work, as suggested in the first of these essays, is the mature modernism of mature professionals. Still inspired by the early Modernist greats and acknowledging the criticisms of postmodernity,

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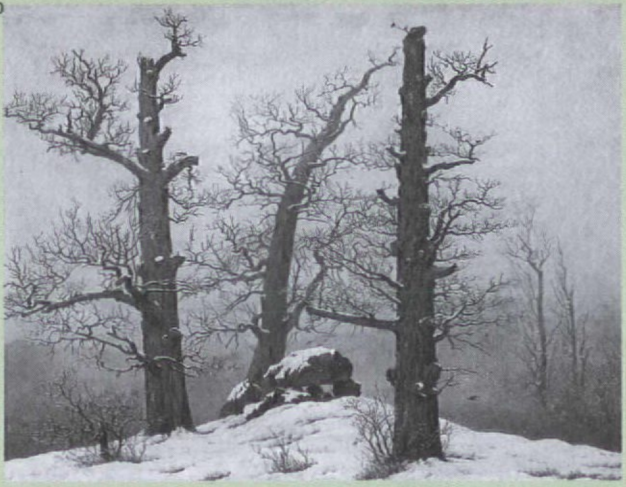

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**19. Plocek House by Michael Graves is typical of much postmodern architecture, historicist or not, in elevating idea or image over reality and so being cruddy in materiality**
**20. A painting by Caspar David Friedrich in which each twig is given equal sacramental emphasis. Something similar is found in Mies van der Rohe's work, and is clear in some of his perspective drawings**
**21. Altes Museum, Berlin, by Karl Friedrich Schinkel, a Romantic Neo-classical architect who inspired Mies**
**22. As modernity draws to a close, the differentiation of the Big Three has become extreme dissociation into exclusivist, near fundamentalist positions, including the quadrant absolutisms shown here. Postmodern theory and architecture are confined to the LL quadrant, much rhetoric and writing about ecology to the LR, reductionist Scientism of the sort associated with Richard Dawkins in the UR and New Age thinking to the UL**

**Picture credits**
12. Gryffindor
13. Aaron Josephson
16. Chris Spike
17. Grace Smith
18. John Lord
19. University of Virginia

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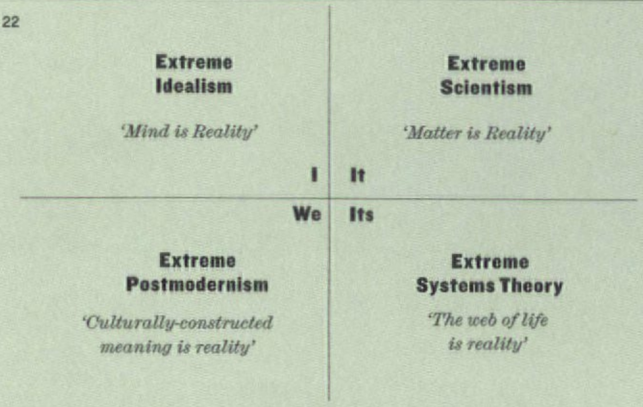


it matches right-quadrant expertise with left-quadrant concerns and sensitivity. The architecture selectively exploits available technology, is sensitive to history and context, refined in form and detail, and embraces the green agenda. The Modernist masters who would drool with envy at the technical expertise, the range of materials and new technologies now available, and the formal and constructional refinement achieved. But however fine they are, these buildings also lack the depth of the technically cruder buildings of the earlier masters, for reasons already explained. None can sustain the critical exegesis scholars apply to works of Wright, Le Corbusier, Mies and Kahn. Yet if less compelling as artworks, they are much better buildings.

In contrast to these architects, most others draw in a too exclusive and unbalanced a manner from either the right or left quadrants. Many still churn out squalidly mean-spirited, utilitarian buildings that exactly conform to the reductive modern paradigm. Others, who also limit themselves to the right quadrants, exaggerate a single aspect of modern architecture, sometimes intensifying what was pathological. They thus exemplify MacLuhan's notion of the sunset effects, last fling flare-ups of a passing phase. Minimalists, for instance, take abstract form yet further in pursuit of an evanescent immateriality or assertive materiality. The creepy deadness (and often the stilted interior arrangements) unconsciously reflects Newton's now waning, dead and meaningless, clockwork universe – exemplifying another MacLuhan idea: that art makes visible the environment (or paradigm) of the previous era. Other obvious caricatures of right-quadrant modernism are High-Tech, the fetishisation of industrial technology (the previous era, again) icons and Parametricism. The latter two take the sculptural excess that was an occasional feature of modernism to new levels of meaningless autism, as facilitated by the computer. As stand-alone objects the buildings resulting from all these approaches are fundamentally anti-urban, neither defining nor articulating urban space, unable to relate to other buildings, and defying any relationship with humankind. They are not merely sunset effects, but utterly irrelevant to the future, not least for being exclusively right quadrant.

Similarly irrelevant are the left quadrant extremists, the postmodernists whose works illustrate spurious and ungrounded theories, scenarios, concepts, datascapes or whatever. How these have got away with it for so long is a tribute to the power of celebrity culture and uncritical gullibility and mind-warping theory. But current financial stringency might put paid to such foolishness.

Next month we will start to use the AQAL diagram as a framework to ensure comprehensiveness in our deliberations. In these we will redefine the purposes of creativity, design and architecture and explore what an architecture of the emergent era shaped by due consideration to all four quadrants might be. This will be founded in a more complete notion of reality than underpinned both modernity and postmodernity, while transcending and including lessons from both, so as to be relevant to a very different future and a much enhanced view of what constitutes the good life and full humanity.

**We invite readers to join the debate. Send your comments and observations on The Big Rethink to areditorial@emap.com**

1. This table was based on that in Charlene Spretnak, *The Resurgence of the Real: Body, Nature and Place in a Hypermodern World*, Addison-Wesley, Boston, 1997.
2. See Richard Tarnas, *Cosmos and Psyche*, Viking, London and New York, 2006.
3. Jean Gebser, *The Ever-Present Origin*, University of Ohio Press, 1985. German original, *Ursprung und Gegenwart*, 1949. Although this book, his only work translated into English, has influenced key thinkers, it is a far from easy read. Unfortunately the best studies of Gebser's thought, such as those by Georg Feuerstein, are currently out of print.
4. See Don Beck and Christopher Cowan, *Spiral Dynamics: Mastering Values, Leadership and Change*, Blackwell, London, 1996.
5. See Ken Wilber, *Sex, Ecology, Spirituality*, Shambala Publications, Boston and London, 1995. For a more accessible approach to the contents of this book see Ken Wilber, *A Brief History of Everything*, Shambala Publications, Boston and London, 2000.
6. Both the availability of books and resurgence of reason led to an increase in linear thinking and left brain dominance (something different to the left quadrants), key characteristics of modernity. Leonard Shlain, for instance, in *The Alphabet and the Goddess*, Penguin, London, 1999, shows that women suffered huge setbacks in history as two key innovations prompted increases in linear left-brain thinking: when script was invented in early Mesopotamian cities, at the beginning of civilisation; and then with the witch burnings that followed the introduction of printing, at the beginning of modernity. (Marshall McLuhan, who inspired Shlain's argument, had predicted prior to this that because of television and the general surfeit of images, both perceived in less left-brain dominant modes, the rise of feminism was inevitable.) Iain McGilchrist, in his utterly brilliant *The Master and His Emissary*, probably the best book on the evolution and character of modernity, also sees it as the product of left brain dominance taken to a pathological extreme. See Iain McGilchrist, *The Master and His Emissary*, Yale University Press, London and New Haven, 2009.
7. See Charlene Spretnak, *Relational Reality*, Green Horizon Books, Topsham, Maine, US, 2011.
8. See Roger Scruton, *Modern Culture*, Continuum, London and New York, 2005.
9. A classic book on this topic is Richard Sennett, *The Uses of Disorder*, Knopf, New York, 1970
10. See Thomas Beeby, in *Threshold: Journal of the School of Architecture*, University of Illinois at Chicago.

# REVIEWS

## Alternative practice

### DAVID ROSENBERG

*Spatial Agency: Other Ways of Doing Architecture,* Nishat Awan, Tatjana Schneider, Jeremy Till, Routledge, £24.99 (pb)

When the writers of this volume express the hope that the tweet that refers to their work as 'worthy' is well-intended, they are probably wrong, but so too is the person responsible for that tweet. In focusing on 'engaging architectural practice with political and social contexts', this is the right book, at the right time; but made by too limited a combination of people, and in the wrong format. It is an important research project, best suited to a living online presence; well-researched, but poorly presented.

*Spatial Agency* begins with a horrible subtitle (*Other Ways of Doing Architecture*) and feeble cover (more apposite would have been a detail of a Bureau d'Etudes illustration, or – even better – an Eames 'What is Design?' pluralistic and pragmatic diagram from 1969). It progresses beyond a brief series of intriguing images (of Rural Studio, Bauhäusle, and Haus-Rucker-Co, for example) to a barely readable and apologetic introduction, wades through too much text and too few images, but concludes with a marvellous and concise compendium of practitioners (doers?), movements and organisations. Yet all is not as bad as it may seem: the latter and better part of the book constituting two-thirds of the same, and being a generous and genuinely worthy survey of the genre. While including some surprises (Arup Associates and Coop Himmelb(l)au, for example, until one spots the '1963–1985' and '1968–1980' qualifications respectively), there are perhaps a couple of UK omissions (the Agents of Change and Sarah Wigglesworth Architects; with regard to the latter, Till's wife, one suspects he would have been damned either way). Not for the first time, here is a book that reads better from back to front.

However much its writers may object to the phrase, this book presents 'alternative architectural practice' (the working title that the introduction spends three-and-a-half pages rejecting) and promotes an unorthodox approach to effecting and understanding the production of the built environment. In that, it is not only laudable but important, but to rephrase the *Dictionary of Alternatives*' statement that 'one person's alternative is another person's orthodoxy', these alternatives in turn create their own orthodoxy, and the writers fall into the trap of the self-reflexive language in which they accuse architecture of having 'wrapped itself ... since the Renaissance' ('we wanted our project to be able to engage with projects and practices not through their overt alterity but through the possibilities that they offered'). Indeed, at times the writing brought to mind Peggy Noonan's description of Sarah Palin being 'self-referential to the point of self-reverence'.

The voice of the academic, of theory rather than practice, is too insistent for the first third of the work, of which 'to argue that there is not a direct, causal link, between beauty and happiness, or at a wider level between aesthetics and ethics, is not to argue for the dismissal of the role of aesthetics and tectonics, but to more realistically understand the role they play in the context of the much wider set of social conditions to which architecture contributes' is but an example. This is an ironic outcome, as a superficial reading of the compendium might merely reinforce Shaw's idiom that those who can, do, and those who can't, teach. It is also the insistence on 'doing' over 'practising' that grates from the start; Till's own website is peppered with the word, and one may be forgiven for thinking the professor doth protest too much in his inverted academic snobbery.

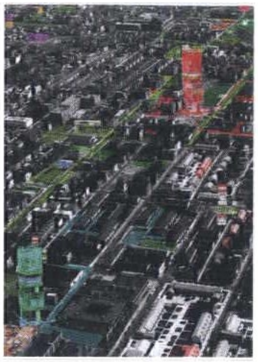
For readers hoping that this book might put into practice what Till's excellent *Architecture Depends* urged

**Below: Social housing in Mulhouse, France by Lacaton & Vassal. The apartments provide double the normal living space through shrewd handling of the construction programme. The architects had to work directly with local authorities to ensure that the residents were not overtaxed as a result of living in such spacious dwellings. Photo: Philippe Ruault**

architects to do, or who expect it to continue on the high that it may well have left them, they will be sorely disappointed. That a publication concerned with inventive and inspiring alternative approaches partly resulting from collaboration should be written by a collective of writers is appropriate, but that those writers should come from so narrow a field (academia) is unfortunate. As a result, it is over-academic but underwhelming, where the transformational work it showcases demands a different platform and presentation. Research has not translated well into doing, and, while the writers note that 'much of the "making things visible" is happening online', and even refer the reader to the Spatial Agency website, because there one can sort the entries like any database, they have not understood that a book of this type undersells so powerful a concept.

Anyone who considers it reasonable to judge a book by its cover, its typography, or the smell of the paper on which it is printed (another reason to go digital), may also be irked to discover that even as an academic publication *Spatial Agency* is a little sloppy. Where the turgid text is at least cogently and helpfully ordered, there are endnotes that don't tally with the main text. The graphic design is dominated by the feel of a website (double columns, underlined hyperlinks that don't work), but without a user-friendly interface. Look beyond all this, however, and greatness can be found; there are genuinely moving examples of alternative architecture, such as Elemental's Iquique dwellings, and the social housing at Mulhouse designed by Lacaton & Vassal and its transformation over time, or Malcolm Wells' Underground Art Gallery. These sit neatly alongside the better-known work of Hassan Fathy or Walter Segal. Such projects and the intriguing maps of Bureau d'Etudes, which make visible complex relationships, are crying out for better and bigger imagery, and photographs populated by people, particularly given the social nature of the subject-matter.

Significant and timely (the introduction makes suitable reference to the recession), the book falls short of 'one of the key aims of spatial agency', that of 'the uncovering and making visible of hidden structures, be they political, social or economic'. This challenge is yet to be met fully and successfully, as neither this book, nor the website in its current form, does justice to the spatial justice it quite rightly seeks. It works in theory, if not in praxis.



**Above: Urban voids in Pennsylvania. Ecosistema Urbano's strategy for the self-reparation of the urban tissue of Philadelphia. The practice defines their field of interest as 'creative urban sustainability', achieved through a combination of urbanism, architecture, engineering and sociology**

## Perpetuation of our fears?

**AUSTIN WILLIAMS**

*Cities Under Siege: The New Military Urbanism,* Stephen Graham, Verso, £19.99

In 1950, a quarter of the world's population was urban. In 2011, the figure stood at 50 per cent. By 2050, the proportion of people living in urban areas is expected to have risen to around 70 per cent. This urban transformation has often been considered to be a virtue, but some view it differently, as a source of instability and conflict. The United Nations calls cities 'dynamic centres of creativity, commerce and culture' but adds that they are 'better known for their chaos and grime'.

Nowadays, the negative viewpoint seems to be in the ascendant with rapid urbanisation regularly seen through the contemporary prism of social, political and ecological concerns: over-population, erosion of traditional values and the dangers of pollution, to name but a few. Within the West, as cities grow, it seems that with them grows a heightened sense of social unrest, violence, urban blight and a community breakdown.

This book explores the consequent mechanisms used to contain those perceived negative tensions. It begins with an exploration of the terminology that has entered everyday conversation; moves on to the various techniques employed to quell instability; followed by global case studies and ending with the author's own oppositional *cri de guerre*. He looks at the fact that many interventions – from gated communities to 'wars on terror' – actually perpetuate rather than placate our fears and correctly advocates free 'associational citizenship' as opposed to the formation of quasi-juridical private individual. This is an important liberal argument and one which those proponents of 'protecting the individual', terror-proofing, surveillance or 'forting up' should understand.

*Cities Under Siege* looks at how the language of war permeates metropolitan politics; how the fear of anti-social elements is used by authorities to pacify protest; and how military doctrine is re-emerging into urban discourse and practice. For this, it is worth reading, even if it is not the most readable of books.

However, here are some concerns. First, it is based on a series of previously published articles, going as far back as 2005. The conclusion dates from 2008 and four years is a long time in politics, especially since the start of the (forthcoming?) recession has had a significant impact on this narrative. To read that Republicans 'widely depicted Democratic presidential candidate, Barack Obama, as a lurking ally of that ultimate terrorist foe, Osama bin Laden' rings a little oddly in the circumstances.

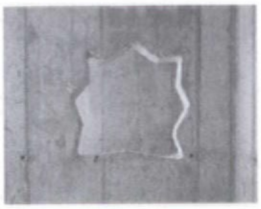
Second, from the famous ring-of-steel in the City of London that followed the IRA bomb attacks in the 1990s, to the proliferation of nearly two million CCTV cameras today, it has long been recognised that urban Britain is heavily monitored by the state. But militarised? Isn't this over the top?

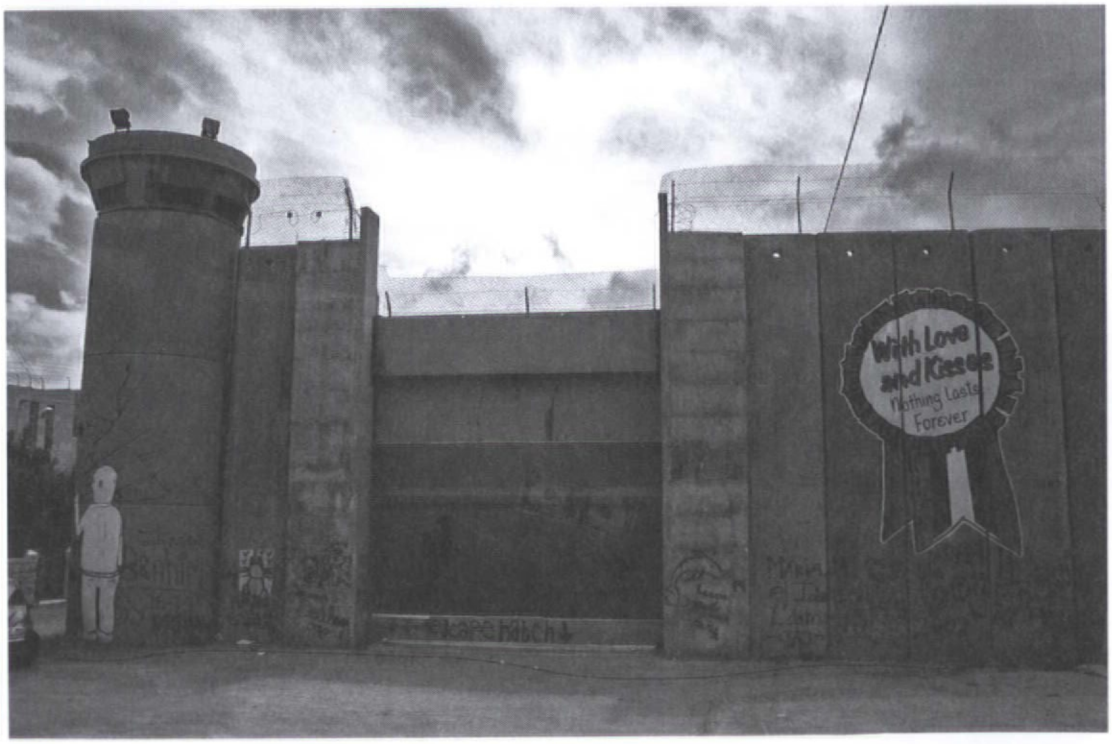
Third, it is true that, in many countries, authoritarian states still bulldoze shanties, biometric information is now regularly mined from the public without request (and without protest) and wars still take place in countries about which we know little. States detain, deport and kill people. However, to claim 'urbicide' (political violence designed to erase or kill cities) is a fetishistic architectural interpretation of reality. From Hiroshima to Troy, military tactics have included physical destruction, but it seems somewhat perverse to take it as a personal affront to architecture.

Finally, Graham occasionally lapses into bilious rants. Here's one example, which needs to be quoted at length: 'With the easing of state monopolies on violence and the proliferation of acquisitive private military and mercenary corporations, the brutal "urbicidal" violence and dispossession that so often helps bolster the parasitic aspects of Western city economies, as well as feeding corporate capitalism, is more apparent than ever.' For this reviewer, these Castro-esque position statements muddy some of the intelligent observations that run through the book.

In some respects this book is the flipside of Stephen Duncombe's *Dream: Re-imagining Progressive Politics in an Age of Fantasy*. Where Duncombe claimed to invent a progressive narrative for society, so Graham reveals the existence and origins of the negative imagineering: those intangible power relationships that give society cohesion. Both want to rediscover a positive challenge to the debilitating paranoia within society, and both have needed to invent clear foes against which to mobilise. Unfortunately, both have invented a 'rightist' plot to give a framework for their ambitions. But not only does this concentration on neo-liberal world domination seem dated, it also sounds ironic given that most states, and particularly the Conservative ones, appear to be hopelessly rudderless at the moment.

In fact, the Manifesto Club, a small left-wing action group based in London, has written many reports detailing what they call the 'Hyper-Regulation of Public Space'. These are the commonplaces of intrusive intervention in civic space about which we have become blasé. So whereas Graham suggests that this is some kind of right-wing, military authoritarian attack on implicitly leftist liberalism, the insidious colonisation of public space has regularly come from the liberal left demanding onerous restrictions on odious right-wing groups. Tragically, it is now considered illiberal, naïve or plain stupid to defend freedom, without first listing the caveats. Graham seems unable to grasp this structural collapse in political ideology and seeks to impose his own fantasy interpretation. However, just like Castro's memoirs, his thesis reads – in part – as if it comes from another era.





**Top: Simulated Palestinian street built in the Negev desert for the Israelis by the United States Army**
**Above: A wormhole allowing Israeli soldiers to practise moving through the walls of Palestinian cities and refugee camps**
**Below: A United States urban reconstruction of a road in Baghdad used for military training. The fake street is modelled on Israeli occupied territories on the West Bank**

## The ultimate image

### ANDREW MEAD

*Andreas Gursky*
Louisiana Museum of Modern Art, Humlebæk, Denmark, until 13 May

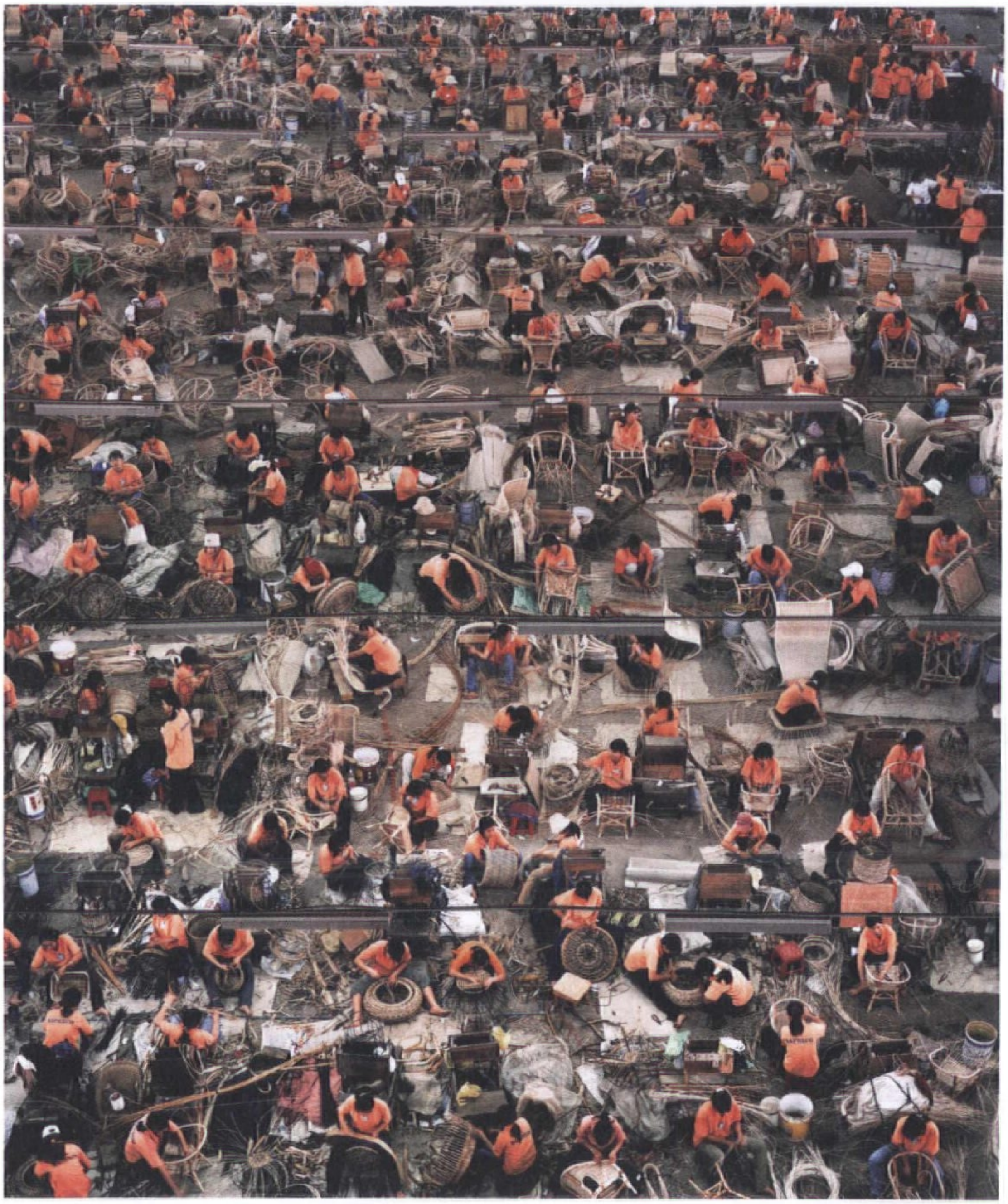
The German photographer Andreas Gursky has had scores of exhibitions during the last two decades, including a copious retrospective at New York's Museum of Modern Art (MoMA), but one of the most focused of them was in 2008 at the Mathildenhöhe in Darmstadt. In that Jugendstil sanctum, Gursky's show was simply titled *Architecture*, acknowledging that more than half the works he had made since the late 1980s had taken architecture as their theme. The organisers presented Gursky as 'an iconographer of the dramatic transformations taking place in our consummately urban age', and he clearly goes along with that, saying: 'I am interested in the ideal typical approximation of everyday phenomena – in creating the essence of reality. In fact, I always seek to create the ultimate image.'

As at the Mathildenhöhe, Gursky's latest exhibition is at a destination for architects – Jørgen Bo and Wilhelm Wohlert's Louisiana Museum on the Danish coast. It serves as a retrospective of more than 20 years' activity and fills four big rooms, a staircase and a lengthy corridor. Gursky's works are often very large in size – one photograph here is 5m wide – but they have enough space to breathe in a well-judged installation. It is a shame that the reflections they attract can make it difficult to study them, for these are certainly not photographs that reveal themselves in a moment: they are dense with sharp detail and you need to take time. And because you can find so much in them, their size is justified – they are not simply grandiose.

In making his inventory of 'everyday phenomena', Gursky ranges widely: from antiquity at its most monumental in the Pyramid of Cheops in Egypt to the present at its tackiest in the piles of gaudy merchandise in a 99-cent store. He relishes a crowd scene, whether at the Tokyo Stock Exchange, a concert by Madonna, or a furniture factory in Nha Trang, Vietnam, where rows of workers weave cane in what could only be called a sweatshop. But he also has a taste for the sublime, whether in an Alpine emptiness that would have awed the Romantics or in its technological equivalent today – an extraordinary neutrino tank in a former mine in Japan, where the chamber is studded with gleaming eye-like hemispheres reflected in a pool below.

All these scenes are presented with scrupulous detachment, as if Gursky is a distant observer with an Olympian gaze. But just as the gods sometimes descended from Olympus to meddle in human affairs, so Gursky interferes with the scenes he documents, digitally manipulating them to achieve his effects. This may just be a matter of removing unwanted elements or adjusting the colour but can extend to making a composite from multiple exposures. Ever since photography was invented, its fidelity to reality has been suspect, but Gursky introduces a new level of doubt. Paradoxically he would argue that only in this way can he reach 'the essence of reality' and make the definitive image of a subject.

It is presumably through some sort of manipulation that Gursky's photographs retain their pinpoint sharpness over such a depth of field, inviting you to scrutinise every centimetre of their surface. One stunning example at Louisiana is a scene from the Tour de France cycle race, where Gursky has found a way to present, face-on, the whole of a mountainside on which the participants make their zig-zag climb. As with several of his large portrait-format photos, you tend to scan it from bottom to top, following the route of the strenuous climb (the cyclists are at two distinct points) and registering all the roadside incident. Yet you could mentally erase all the paraphernalia of the race and see this as an immensely detailed survey of the mountain itself: the sparse conifers, the scree, the paths, the weathering and the underlying rock. You are prompted to examine the world with unusual inclusiveness and precision, and in this case Gursky has undoubtedly succeeded in his quest for a quintessential image.



**Above: Photograph of industrious workers weaving cane in a furniture factory in Nha Trang, Vietnam, shot by Andreas Gursky. The photographer's *Rhein II* recently sold for £2.7m, making it the most expensive photograph ever auctioned**

Given that Gursky avoids a single focus in his photos and makes you look at them in their entirety, you can see why he is drawn to a large Jackson Pollock painting at MoMA, but his shot of it adds nothing and seems superfluous to the show. There are further allusions to art in a Rhineland scene reduced to horizontal bands of colour and some recent close-ups of reflections on a river in Bangkok, though these luminous abstractions are less gorgeous than they first appear, for the river is awash with detritus.

Compelling though these Bangkok works are, one of the strongest images in the show is the most explicitly architectural: Gursky's relatively early (1993) panorama of a huge apartment block in Paris. Again it must have taken some manipulation to present this building absolutely flat-on for the 4m-width of the photo, which poises it midway between an intricate abstraction and a record of inhabitation. At a distance it looks like an elaborate mosaic, with the coloured blinds of the apartments reading as tesserae in the encompassing grid; but, close to, you glimpse decor, furniture and lifestyles as you move from one miniaturised window to another.

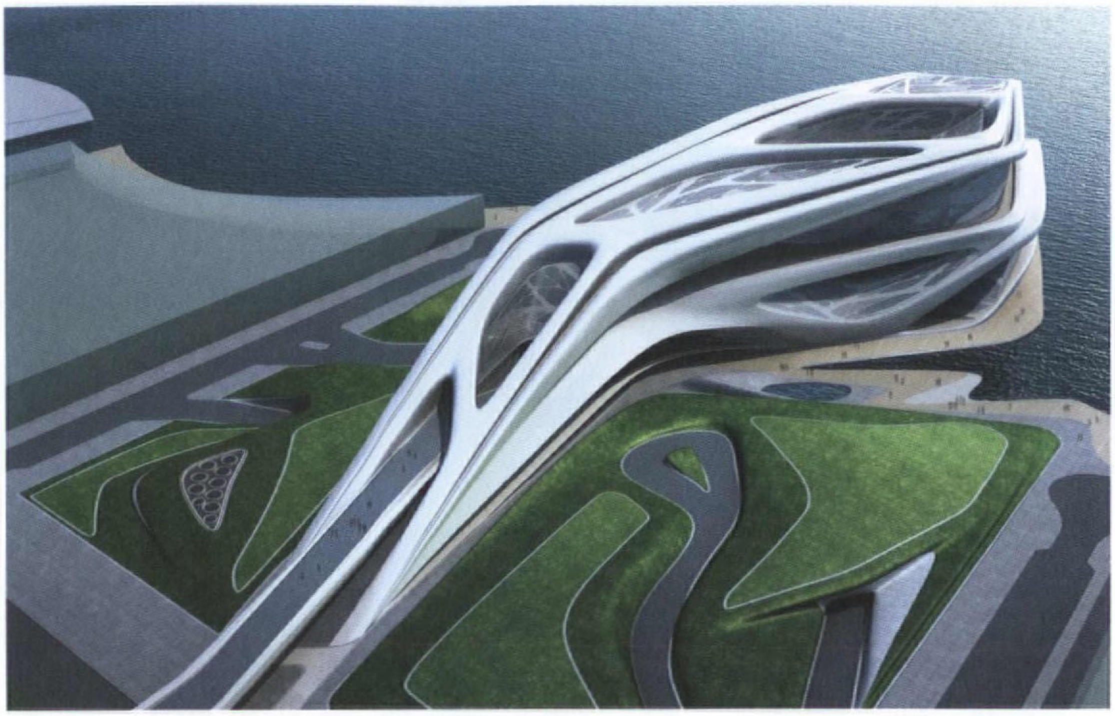
If Gursky shares the detachment of his teachers, Bernd and Hilla Becher, and also their concern with typology, this sense that every corner of the image requires attention may seem at odds with their photographs, whose industrial subjects were always central. In this respect it is well worth seeing another current show at Louisiana: *Plant Drawings* by the veteran American artist Ellsworth Kelly. Mostly executed in pencil and highly economical, they capture the essence of, say, a sunflower or a chrysanthemum with just a few lines. They bring to mind Matisse but also the plant studies of photographer Karl Blossfeldt – an influence on the Bechers.

This isolation of detail in Kelly's austere drawings is in marked contrast to the plenitude of detail in Gursky's glamorous photographs, but they are equally valid ways of conceptualising the world. Given how empty Kelly's rooms were on the day I visited, but how busy the Gursky ones were, it seems clear which approach draws the crowds.

## Architectural style wars

**ROBERTO BOTTAZZI**

*Future Frontiers: the Battleground for Ideas in the 21st Century,* RCA/AR lecture on Style, 2 February, Royal College of Art, London



**Above: A rendering of the Abu Dhabi Performing Arts Centre designed by Patrik Schumacher and Zaha Hadid. Despite being built in the desert, the building's skin incorporates a large amount of glass which Charles Jencks argues makes it a preposterous example of ecologically expensive Parametricism**

The French filmmaker Jean-Luc Godard famously said that 'style is just the outside of content, and content the inside of style; like the outside and the inside of the human body they cannot be separated'. Consequently any dialogue about style is invariably also a conversation about broader issues, to the point that Bruce Mau – almost 40 years after Godard – concluded that style ultimately determines the way we live.

These points were very clear in the minds of two of the finest connoisseurs of architectural styles – Charles Jencks and Patrik Schumacher – who used the platform provided by the Royal College of Art in London as a means to discuss the state of architecture at the turn of the century. According to the predetermined format followed by all the lectures in the series, each speaker outlined his point of view on the subject in a short presentation as a way to instigate a final debate.

Jencks, who took the stage first, immediately turned the audience's attention to how much power and style are historically tangled up. By recalling how in the mid-19th century Lord Palmerston twisted George Gilbert Scott's arm to make sure that the new Foreign Office building in London followed the Classical style (and not the Gothic one Scott had pursued throughout his career), Jencks reminded us that when power dictates style it does so to limit choice and control its public image. He then went on to show how such reduction of stylistic choice eventually led to the birth of the Modern Movement and Le Corbusier's call for a universal style. Through this excursion in history, he implicitly accused Parametricism – or, as he preferred to call it, digital baroque – of following Modernism's footsteps in its attempt to seize diversity to become the only legitimate contemporary architectural style.

Jencks also warned the audience that there are about 150 styles currently present in the global arena and that such pluralism should be seen as a source of richness rather than a formless chaos to be eradicated. This is also because styles are now not only generated by professionals but also by the public; since the post-war rise of the consumer society, it is no longer just architects who decree what is acceptable and what is not in terms of architectural production, but rather a much more complex and varied range of voices, whose diversity Jencks has often celebrated in his works on Postmodernism.

As Schumacher took the floor echoes of stylistic battles of the past pervaded the auditorium. His first slide – unequivocally titled 'What is wrong with Charles Jencks?' – immediately opened fire on Postmodernism. What followed were five points through which Schumacher argued against Jencks's tolerant theories in favour of dogmatic, universally applicable principles which constitute the basis of his theory of style: Parametricism. Schumacher referred to the Bauhaus as a significant precedent for Parametricism: in line with Godard's quote, he maintained that the project of style was never a superficial one and that new styles could only be born out of new societal organisations which in turn required new modes of structuring the built environment.

As with most of Schumacher's theories, it was very hard to disagree with their starting points or the range of issues he tackled, however it was often the tone of his rhetoric which eventually took over and turned the discussion into some sort of propaganda. Exemplary in this regard was the style of the two presentations: Jencks adopted his usual fluent narrative, punctuated by anecdotes and subtle irony; whereas Schumacher replied with a series of text-only slides in which he systematically enunciated the principles of Parametricism; in the words of Schumacher himself 'the new hegemonic global style'.

These sorts of statements were not bound to find a great deal of sympathy in the audience; the quasi-scientific, disciplinary claims of Parametricism were naturally at odds in an art institution in which about a dozen artistic disciplines not only coexist but rather continuously cross each other's boundaries to create new hybrids.

Nevertheless, the theoretical battle continued well into the final debate where Jencks's pluralism and Schumacher's dogmas perhaps understandably never came to an agreement. It was a great evening for those who managed to make it to the RCA auditorium as it not only offered the opportunity to listen to two central characters in the architectural debate, but it also reminded of the importance of critical dispute and disagreement within the academic discourse.

Ultimately, Jencks's gambit proved to be poignant as the evening unfolded: when we talk about style we are always also drawing a map of power. With all the profound differences between the two speakers, they both agreed, though, that debates on style are not only still necessary, but also that they should focus on form as the privileged vehicle for stylistic expression in architecture. Whether it carries symbolic meaning or is generated by digital tools to achieve complex and fluid configurations, form also represents an increasingly problematic double bind for the theoretical discourse: on the one hand, historically stylistic principles could only be extracted from the formal proprieties of architectural objects; on the other, contemporary modes of communications and media have weakened the relation between form and style as they have managed to alter physical environments without employing any architectural form. What has been fading is the privileged position that form has held in expressing content and consequently style; once this position is overturned what follows is also the consequent erosion of the definition of architecture as a discreet, static object.

Possibly, the next battle of styles in architecture will not be between two or more clearly identifiable factions, as has always happened historically, but rather between the tangible reality of the physical environment and the ephemeral and dynamic elusiveness of virtual spaces. For that, we have not got a style yet.

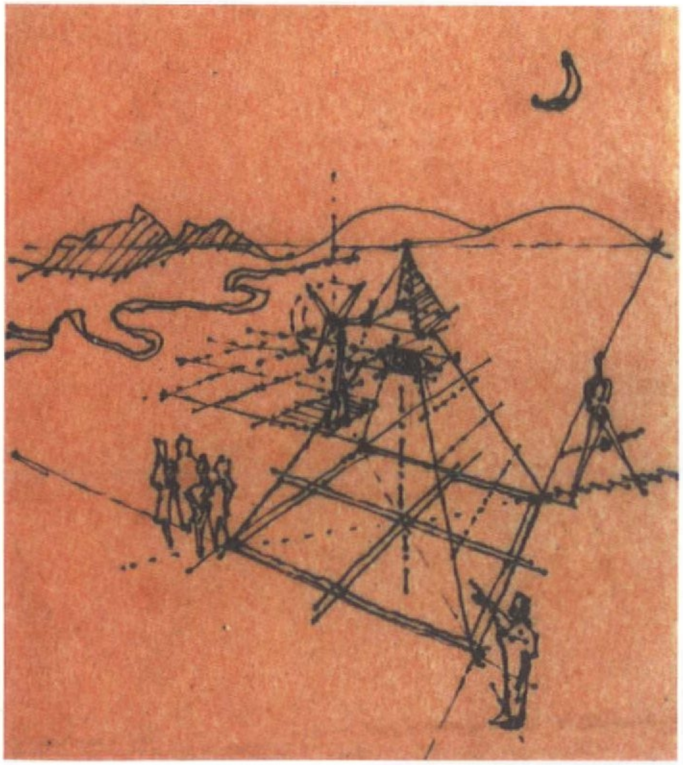
**☛ This lecture can be seen at architectural-review.com/FutureFrontiers**

## Integral plaudits

**PETER BUCHANAN**

*Integral Sustainable Design*, by Mark DeKay, Earthscan, 2011

Integral theory has developed over some decades, initially the product primarily of philosopher and prolific author Ken Wilber working alone. But he draws upon and brings into useful relationship a mass of earlier philosophy and theory from several fields and thinkers, together with empirical evidence from an equally broad range of disciplines, along with the sacred traditions of west and east. There are now a number of parallel figures, particularly in psychology, whose work confirms, expands and draws upon in differing degrees the work of Wilber and so are recognised as Integral thinkers. Integral theory is also being applied to various fields. Of particular interest to architects would be *Integral City* by Marilyn Hamilton (New Society Publishers, 2008) and *Integral Ecology* by Sean Esbjörn-Hargens and Michael E Zimmerman (Integral Books, 2009).



**Below: napkin sketch by Rob Watts on the front cover of *Integral Sustainable Design* which offers a powerful conceptual framework for designers and human developmental theory to reframe sustainable discussion in society**

The Integral approach is especially well-suited to application in architecture, which is also concerned with drawing upon a very wide range of disciplines and with subjective experiences and meanings as much as objective physical reality. So it is surprising that it has had such limited impact so far on architecture. I have drawn upon it for more than a decade and a half – explicitly in lectures, implicitly in writings – while working on and off on a book applying it to architecture and urbanism. Now the big and wide-ranging book under review has appeared applying the Integral approach specifically to sustainable architectural design. Yet it is a tribute to the richness of Integral theory that my book will be quite different to this one, although I have learnt a lot from it that will inevitably, once properly digested, influence my approach. Nor will The Big Rethink essays, that from this month onwards will draw on Integral theory, among other things, overlap with this book.

Although there are now many good books on sustainable design, the focus is primarily on objective, technical and ecological issues – described as the right quadrants in the essay in this issue (page 67). This book provides the vastly expanded context and disciplined intellectual framework for sustainable design that it has lacked to date, not only drawing attention to neglected fields but introducing multi-levelled ways of thinking about them. (It is, in Integral jargon, not only a four quadrant approach but also an all levels one – a subject barely touched on in the essay in this issue.) For instance, among many other things, I found the discussion of the many levels of aesthetic appreciation extremely illuminating. The book thus shows that, no matter how important are current approaches to sustainable design, and despite our ever increasing expertise in them, they are also much too narrow and shallow.

The author is active as an architect besides being a professor and director of graduate studies at the College of Architecture at the University of Tennessee. It seems to be mostly away from the big metropolitan centres that Integral theory is being applied to architecture, perhaps because there is more freedom to develop new modes of thought when more remote from the grip of postmodern theorising. DeKay draws not only on Wilber, but heavily also on *Integral Ecology* (another marvellously rich book and, because of its design and production, somewhat more approachable than this one). And he draws widely on non-Integral thinkers, including Fritjof Capra, using the latter's list of ecosystem principles as the basis of six perceptual shifts he sees as part of the underpinnings of Integral sustainable design. But probably most useful of all is DeKay's application of levels of thinking to his discussion of the quadrants and other matters.

The book is much too rich in content to even begin to summarise, but the Integral approach presents this in a usefully disciplined format, although the result is somewhat overwhelming and not as approachable and attractive as it should be. It has the potential to be a definitive text book and design primer, and is very nearly there. But it is difficult not to get the impression that many publishers do not recognise a book of such potential even when they have it on their list. A paperback, the book is not well enough produced and too expensive, perhaps because of the copious colour illustrations. And it is simply not robust enough for a book that, once discovered, is bound to be intensively used. The book deserves to be reformatted, with a more robust cover (a heavily laminated soft cover would be better), the text carefully polished somewhat and the layout redesigned or at least fine-tuned, and confidently re-launched and widely distributed at a realistic price that will ensure large, long-term sales as architects and students realise that they need a personal copy for frequent consultation.

Despite these cavils, this is a book that should be welcomed and widely read and used. If any architectural school is seriously concerned with preparing its students for the long-term future – a very big if, I know – then this book will play a central role both to guide and ensure the comprehensiveness of the curriculum and as a fundamental resource to be read by all students. It will be equally useful to all practitioners prepared to embrace a much expanded way of thinking about sustainability.

## Sustainable thinking

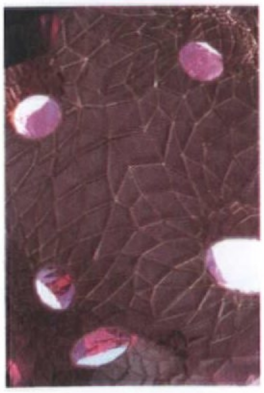
**JENNY SABIN**

The Hans and Roger Strauch Symposium, *Sustaining Sustainability: Alternative Approaches in Urban Ecology and Architecture*, Cornell University, New York, 3–4 February

At the beginning of February, a two-day event at Cornell University discussed the next steps for sustainability. The lectures were delivered by a diverse group of researchers and practitioners spanning multiple disciplines, but who share a common concern for what co-organiser Michael Hensel has labelled 'sustainability fatigue'. This symposium was not centred upon exhausted issues including energy, optimisation and performance, but was instead focused on re-thinking the entire conceptual foundation for the project, one which fundamentally examines our relationship with nature and nature's relationship with humans. Important to this shift is a move away from purely technical solutions to environmental sustainability and a move towards an understanding that our built and natural environments are equally becoming the contexts for thriving hybrid ecosystems.

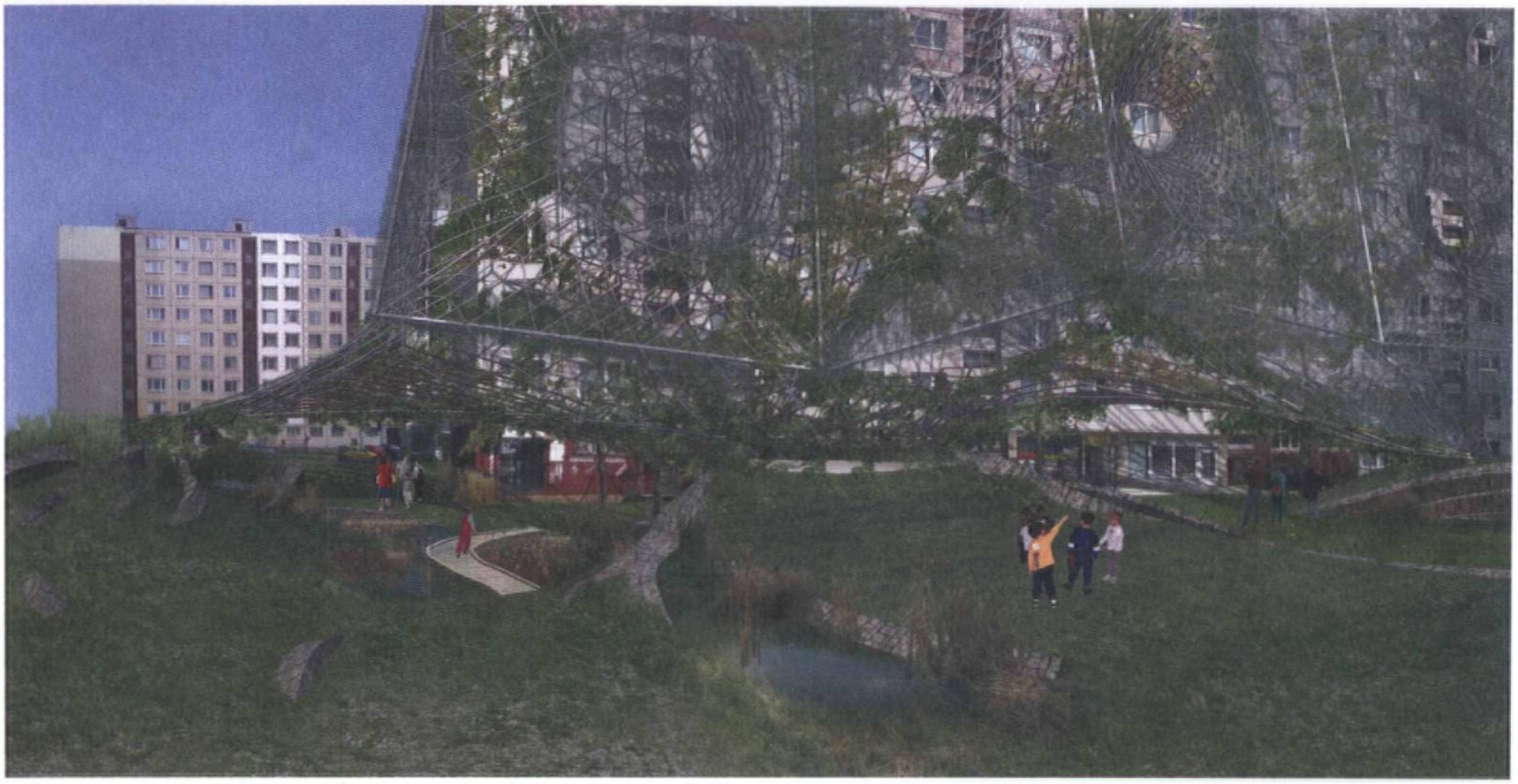
Hensel gave a provocative keynote lecture calling for a non-anthropocentric architectural agenda for sustaining sustainability, an agenda defining humans equal to and not separate from nature. This was outlined with eight major themes spanning multiple scales from material performance to settlement patterns and process. He asked the audience to consider niche environments with several material skins, which in their compilation generate built ecosystems; and he challenged projects that are only engaged in complex shape-making, biomorphic expressions that fall flat as discrete objects disengaged from their natural environments.

Hensel championed common architectural concepts employing degrees of interiority and exteriority where multiple envelopes unfold, one interior into the next. Less common perhaps, or at least in the context of the topic of sustainability, were the sited schemes. The work of Frei Otto and the Blur Building by Diller Scofidio + Renfro were mentioned as exemplary projects where the building envelope is considered to foster its own climate unfolding outwards. Spidernethewood by R&Sie(n), 2007, Nîmes, France was featured for its inventiveness in employing vegetation that extends and connects the built threshold with the local climate. This sits in contrast to what Hensel calls 'eco wallpaper', architectural elements that do not offer long-term sustainable solutions due to their absence of linkages to existing climates and ecosystems.


**Below: A model of the Cherry Blossom Pavilion by Cristina Díaz Moreno and Efrén García Grinda of AMID.cero9 which was exhibited at the 2010 Venice Biennale. It features 'a process of gathering and assembling of post-subcultural materials into third natures'**

Similar to Hensel's call for the unfolding of multiple building envelopes, Birger Sevaldson, professor at the Oslo School of Architecture and Design and principal researcher in the OCEAN Design Research Association, also spoke of this interstitial zone, in what he calls a 'thick boundary'. His lecture promoted systems thinking in design for exploring built and natural ecologies that connect to and expose the inner workings of what Sevaldson labels 'wicked problems'. For Sevaldson, a wicked problem is 'super complex'; indeed, he argues we must look beyond the object and think of everything as being 'super complex'. He offers a cup of coffee as an example of two super complex systems merging, one originating in Norway (paper cup production) and the other in a field in Colombia (coffee production). Visualisation is key in navigating complex systems for design processes enveloped by systems thinking to encourage collaboration for the production of new knowledge. Sevaldson described this 'multi-layered woven fabric of relationships' as a necessity for developing design systems thinking.

Hensel returned and underscored several of Sevaldson's points, particularly concerning visualisation as a means for 'seeing' and comprehending biodiversity, to address architectural solutions that may foster a thickened border of multiple building envelopes. Hensel presented the 'Pigeon Tower' in two locations, one in Turkey and the other in Egypt, as provocative case studies in architecture that generate active hybrid ecosystems that also engage broader systems of production. In Turkey, pigeon droppings were collected and harvested each year for fertiliser to cultivate a new melon farm industry, thus bringing new economic and



**Above: The Green Négligée competition entry by Dana Čupková and Kevin Pratt of Epiphyte Lab dissolves the figure-ground relationship of a Brutalist housing complex in Bratislava, Slovakia. It was inspired by Frederick Law Olmsted's Emerald Necklace of parks in Boston**

trade benefits to the local culture. The other example in Egypt shows pigeons inhabiting the thickness of the wall of a tower where eggs were once collected to bolster the local food supply.

The symposium featured speculative work by a handful of international architects. Dana Čupková and Kevin Pratt of Epiphyte Lab and Cornell University flirted with and inspired the audience with their Green Négligée, the title of which is a spin on Frederick Law Olmsted's Emerald Necklace of parks in Boston. Zone overlap and a loose fit define their competition entry for a thickened ecological net system that enveloped one flank of the building, ultimately dissolving the figure-ground relationship of an existing Brutalist mid-rise housing complex in Bratislava, the capital of Slovakia. Their speculative project expands our notion of beauty within active systems while answering to Hensel's call for multiple unfolding envelopes as a solution for exploring deep architectural ecologies. Energy flows move from juvenile to mature states through sophisticated systems of hydroponic growth, while also answering to cultural necessities of leisure and play. Cristina Díaz Moreno and Efrén García Grinda of AMID.cero9 expanded these topics in their presented projects. Both their Cherry Tree Blossom Pavilion and Opera Prima, feature 'a process of gathering and assembling of post-subcultural materials into third natures'. These new natures ultimately expose new forms of beauty that they claim, 'image the public realm in a subversive manner'.

Jonas Lundberg, a founding member of the Urban Future Organization, expands these notions into the public urban realm. His research, teaching and practice fuse nature, people, technology, economy and ecology as one in which the city is at once a building and the building is the city. His question, 'Where does the city end and the building begin?' exposes Sevaldson's wicked problems where intensive collectivity and collaboration answer to issues that are complex and systemic within a contemporary urban realm.

Marco Poletto of ecoLogicStudio, joined also by Claudia Pasquero, underscored the role of the architect as being centrally concerned with the design and development of built interfaces. Their Cyber Gardens in the city reveal how humans are forces within nature in a geological sense. These virtual gardens generate spaces of social cultivation where for Poletto and Pasquero, 'coding is gardening and information is material for design'. For example, in their current installation in Simrishamn, Sweden, visitors navigate a suspended algae garden, where each unit is fitted with a nozzle to encourage visitors to blow fresh oxygen into the photobioreactor bags.

The final panel discussion provoked a new set of questions concerning design research models, transdisciplinary collaboration, and most importantly, the cultural realm within Hensel's call for a non-anthropocentric architectural agenda. We may argue over the slippery cultural gradient prescribed, subscribed or extracted from anthropocentric versus non-anthropocentric models for architectural design, but what was made clear is that our next steps concern fundamental relational calibrations between humans and nature. John Marzluff, Professor of Wildlife Science at the University of Washington had the simple message: 'to sustain connections between humans and nature, we need to put a face on biodiversity by making it personal'. For Marzluff, deep ecology is also cultural. We need to place importance upon recalibrating our relationship with nature to address next steps in sustainable design. Sustainable architecture should therefore be less concerned with issues of optimisation and energy manipulation and more emphatic about facilitating built interfaces between humans and nature.

# PEDAGOGY

## FAUUSP, São Paulo, Brazil

### MATTHEW BARAC

Christmas came with extra trimmings for Brazil when, as widely reported in December last year, it overtook the UK to become the sixth largest economy in the world. Although current growth forecasts, at 2.5 per cent for the coming year, show a moderate slow-down, the country remains buoyant – and ready to show off about it on the global stage: Rio de Janeiro is due to pick up the host-city baton from London for the next Olympic Games, and the 2014 World Cup is on the horizon. Alongside these headline-grabbing events, it is increasingly recognised that the rapid expansion of urban centres over recent decades amounts to a massive change in our way of life – a change showing its impact in the worldwide rise of the 'mega-city', and São Paulo is a prime example.

Transformation of this scale, choreographed to the fanfare of international sporting spectaculars, naturally begs the question of what it all means for Brazilian architecture. Does design have an appropriate platform in national policy on proliferating urban development? Is Rio getting stage fright at the prospect of four billion pairs of eyes trained on the 2016 Games? As shepherds for the next generation of design professionals, architecture schools are necessarily engaged in such debates. Milton Braga, partner in the much-fêted firm of MMBB and a professor at the Architecture and Urbanism College of the University of São Paulo (FAUUSP), highlights the value of embedding an urban dialectic in the architectural curriculum. It is, he says, essential to good practice: 'Students are always thinking about the city and so they have to consider the collective. This is our tradition – the social tradition of the Paulista School.'

With big money pouring in and mega-projects on the drawing board, keeping social values on the national agenda will be a challenge. But, according to Braga, the mood is far from cynical: 'People who work with design feel this sense of commitment very much. Until recently, there were few incentives to commit funds to construction, but now the possibility of running projects that can be paid for is clearer.' This new stability is enhanced by the 'demographic dividend'. A widening skills base, declining birth rates and increased life expectancy offer Brazil a unique opportunity for consolidation, which the emerging cohort of students will have to live up to. And with a newly

**1, 2 & 3. Section and plans from a group project to redevelop a Metro station in close proximity to the FAUUSP campus. The overarching ramp would provide parking for cyclists while creating shelter for bus stops and cafés beneath**
**4. Students at work in the expansive studios of FAUUSP's vast Faculty of Architecture and Urbanism, designed by Brazilian modernist João Batista Vilanova Artigas and completed in 1969**
**5. Renderings of the group's Metro station development illustrating the shaded public space tucked beneath the bicycle parking lot**

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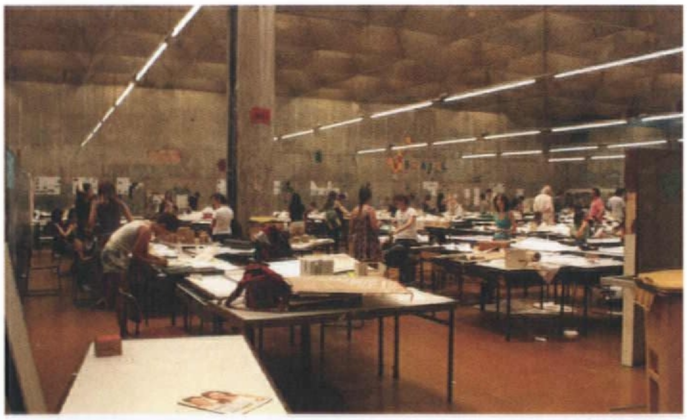

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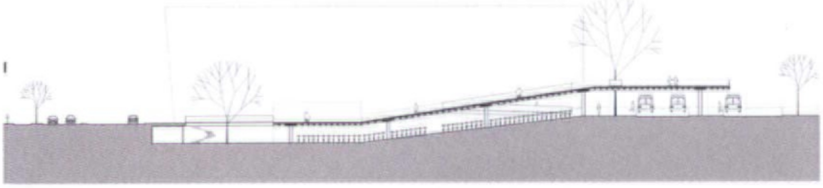

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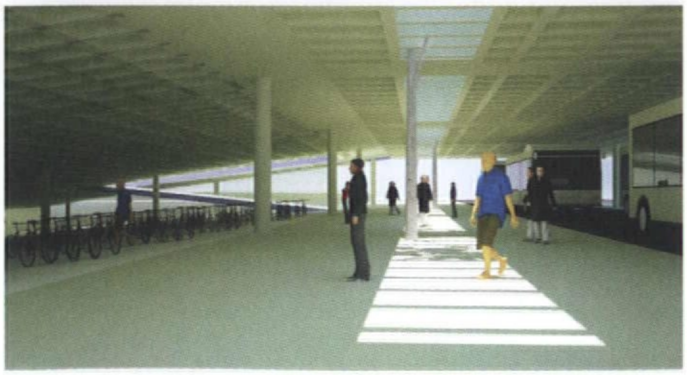

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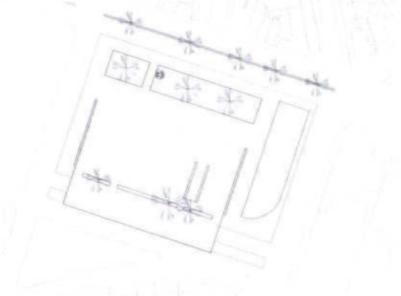

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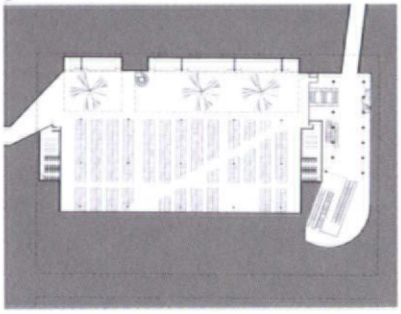

formed regulatory body, the Architecture and Urbanism Council, the profession is showing signs that it too is preparing for the challenges ahead. Francine Vaz, a sustainability consultant who completed her architectural studies in Rio, agrees: 'This is indicative that things are going in a better direction.'

Unlike the UK's three-part route to qualification, Brazil's architecture students follow a continuous five-year course. Undergraduates at FAUUSP are steered through several mandatory studios, but only four address building design: the first is introductory, the second studies infrastructure, the third patterns of inhabitation and the fourth 'the urban equipment of public interest'. For Braga, engagement with the contextual reality means teaching students to think strategically about how design can bring diverse issues together; how to integrate responsiveness into their decisions, but also how to judge the merit of a strong *parti*, recognising the fact that a forceful concept will inevitably exclude some opportunities just as it frames and supports others.

As the centrepiece of a storm-water reticulation strategy, final-year student Carlos Miller proposed a garden island across several São Paulo city blocks. A moat, which rises and falls according to mountain rainfall, fills the gap between the uniform street pattern and irregular island shape, and a rapid-transit bus route and cycleway cut through its middle. The design concept rethinks the infrastructure of flood defences in a chain of detention ponds and canals, with associated public spaces that orchestrate encounters with the city's storm-water runoff. By inviting nature back in, rather than suppressing it or concreting over it, the unashamedly geometric scheme articulates a less abusive, more sustainable relationship with the city's hinterland.

A preoccupation with optimising the performance of public works can be seen in a group project produced by five students as part of their infrastructure studio coursework. A metro station near the university needed to function as a student hub and a transport interchange for the wider community. A ramped plane forms a rooftop parking lot for 2,000 cycles, with the balance of the hybrid programme (cafés, bus stops and service spaces) tucked beneath. Such projects explore how architecture can connect different scales and styles of urban life, and provide a medium for articulation between city-making processes that have become estranged, argues Braga. 'In my opinion, the biggest challenge of Brazilian design is to build a coherent character for the city.'

**6. Plans from Carlos Miller's fifth-year project for an urban park in São Paulo. The moat separates the garden island from the streetscape and mitigates floodwater drainage from the mountains into the city's canals**
**7. A diagrammatic section through the crossroads of Miller's scheme reveals how ponds and swamp-like channels are arranged to purify floodwaters while improving public transport for the wider community**
**8. An overcast rendering from Miller's project. The island is linked to São Paulo's transport system through footbridges, cycleways and a direct bus connection**

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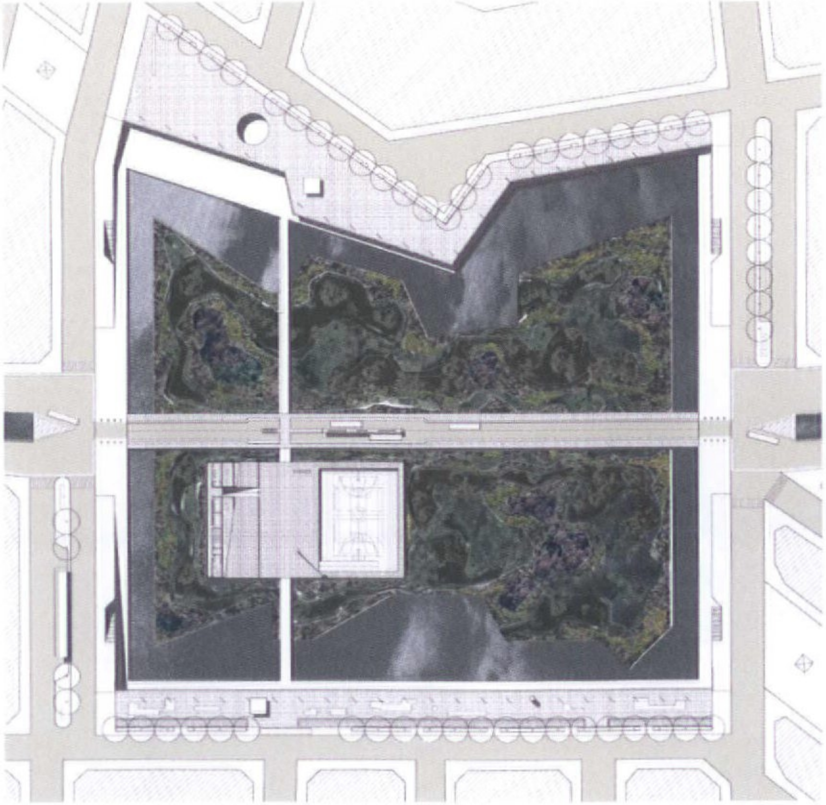

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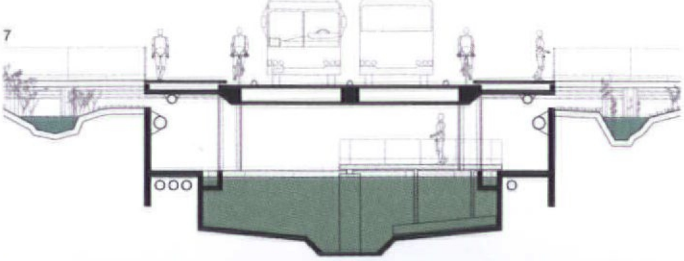

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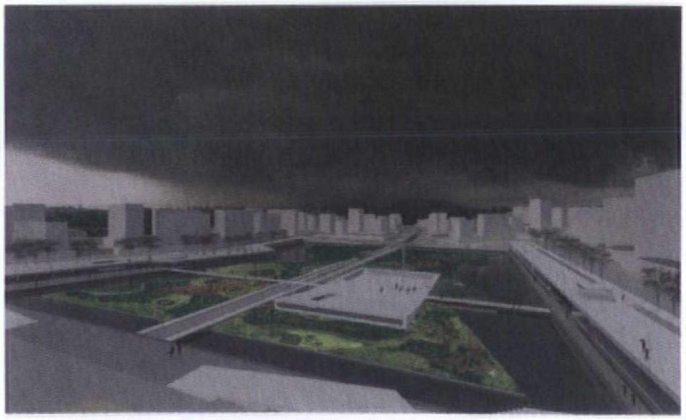


# REPUTATIONS

## Philip Johnson

### MARK LAMSTER

With Philip Johnson one can hardly speak of the term *reputation* in the singular; I know of no other architect who has had so many of them, or more contradictory ones. He liked it that way. For the better part of his 98 years, he was a public figure and subject of contention. Even now, with his death in 2005 receding into memory, he remains a polarising figure, an architectural litmus test, a man at once beloved and reviled.

Johnson was different things to different people, and sometimes different things to the same people. To the general public he was a dapper *éminence grise*, the personification of the gentleman architect. To the developer he was a high-end brand, a name to be affixed to the latest stack of floor plates, with a corresponding bump in prestige and profit. To his fellow architects, or some of them, he was a kingmaker who thrust the profession into the public consciousness, the man who minted celebrities and virtually created the 'starchitect' class. To others, he was a dark force who stripped Modernism of its social agenda and then betrayed it twice more, first as standard-bearer of the postmodern movement, then as promoter of deconstructivism's empty formalism.

If there is a difficulty in nailing him down, it is because he was a man of endless contradiction. It is this fact, above all, that makes him such a fascinating, beguiling figure. (Full disclosure: I am at work on a new Johnson biography.) He was a historicist who proselytised for the new, a populist who was an elitist, an anti-Semite who befriended Jews, a visionary who lacked vision, a 'genius' who proclaimed his lack of talent, an *enfant terrible* who was a bastion of the establishment, a gossip and an intellectual, a gay man in a homophobic corporate world. He could be heart-breakingly cruel, breathtakingly generous and flat-out hilarious. He shifted with prevailing winds with the tactical skill of an America's Cup champion – except for those times when he didn't.

Since he was so old for so long, it is instructive to recall how young he was when he thrust himself into the public consciousness, in the early 1930s, as director of the nascent architecture department at the Museum of Modern Art (MoMA). Johnson was neither an architect nor an architectural historian, then, and still in his 20s. His mentors, Alfred Barr and Henry Russell-Hitchcock, were hardly august figures, each approaching 30 ahead of the opening of their awkwardly titled Modern Architecture: International Exhibition. Is it any wonder these three Harvard-trained aesthetes codified the modern movement in art historical terms, or that their show retroactively assumed the name they conjured, the International Style?

Johnson's rise was a product of his own wealth. In the 1920s, while a student at Harvard University, he came into a fortune, a gift from his father. That money allowed him to travel abroad as he wished, to have Mies van der Rohe design him a New York apartment, to bankroll an assistant at MoMA. It inoculated him against the pressures of the world and allowed him to experiment for himself when there was no great demand for his services. His career, certainly, is an illustration of the power of affluence in a sharply divided American society.

In his prodigal years of the 1930s, he hoped to apply that power not in the field of architecture, but politics. He left MoMA, in 1934, and became a tireless advocate for a series of loathsome right-wing figures, including Hitler. He imagined himself as something of an American *führer*, and it was only when that plan collapsed that he returned to architecture, and as a practitioner not just a propagandist.

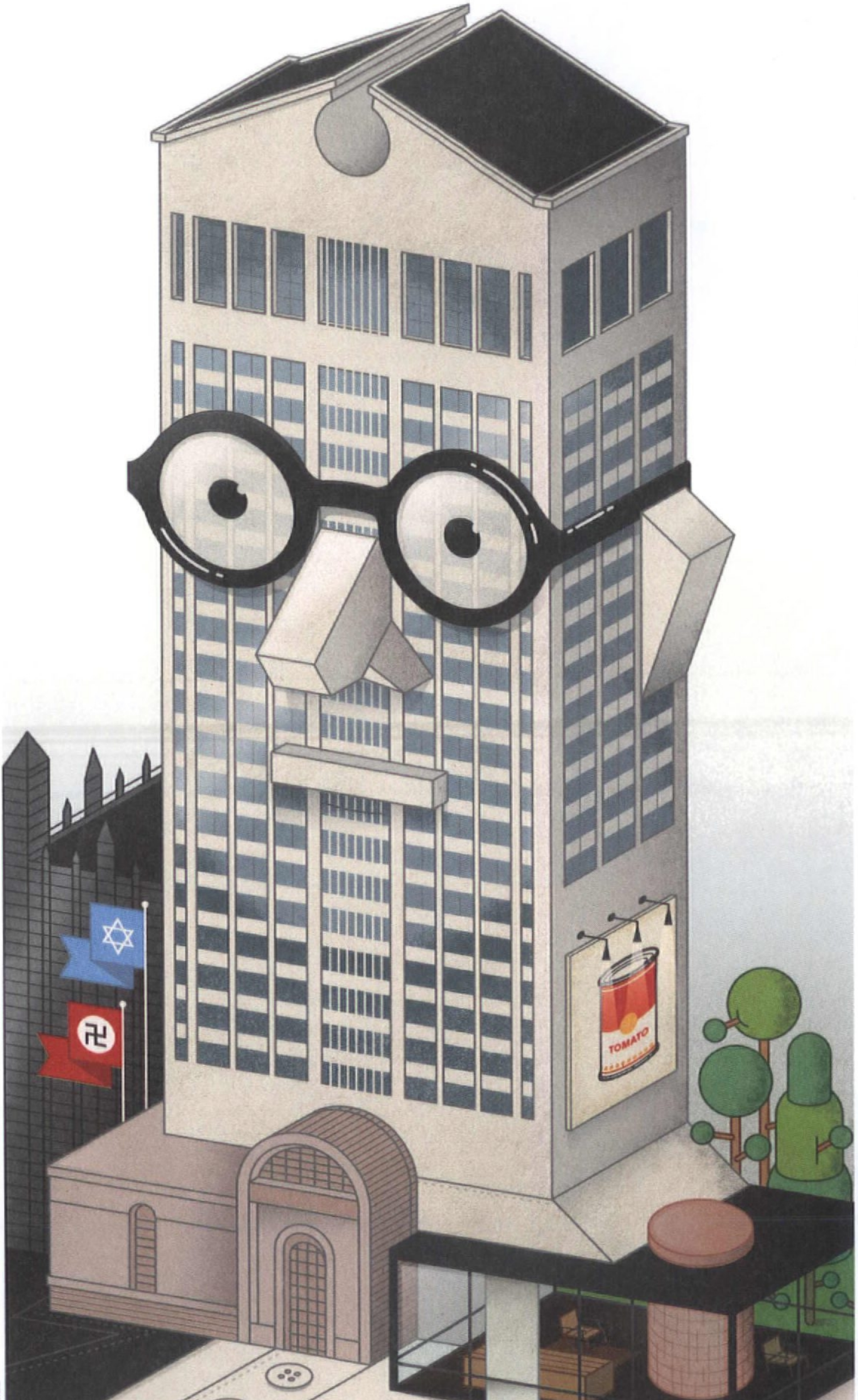
> 'He was a kingmaker who thrust the profession into public consciousness'

**Philip Johnson**
**1906–2005**
**Education**
**Harvard University**
**Educator**
**Director of the Architecture Department at the Museum of Modern Art (MoMA)**
**Key buildings**
**Glass House, Connecticut (1949)**
**Seagram Building, New York City (1958)**
**Pennzoil Place, Houston (1975)**
**AT&T Building, New York (1984)**
**Garlands**
**AIA Gold Medal (1978)**
**Pritzker Architecture Prize (1979)**
**Quote**
**'All architecture is shelter, all great architecture is the design of space that contains, cuddles, exalts, or stimulates the persons in that space'**

His greatest gift may well have been as a wielder of influence. He sat on juries that shaped the discipline's future, doled out commissions, used his position at MoMA to shine a spotlight on those he deemed worthy and to orient the discipline in new directions. The list of architects who benefited from his patronage, the 'kids', as he called them, is a veritable who's who of contemporary practice. To be invited to his table in the Grill Room of the Four Seasons – number 32 – was a rite of passage. The restaurant was his design, one of his underrated contributions to the Seagram Building; without him it would have been a more sober place. For that matter, it might not have existed at all. The promotion of Mies in the United States had been a decades-long personal mission for Johnson, and it was Johnson who brought him together with Seagram heir Phyllis Lambert.

Johnson is often underrated as an architect, largely because he produced, to be frank, a great deal of truly awful work, especially during his later, 'I am a whore' years, and because his two most prominent works are so polarising. There is, first and foremost, his own Glass House, too often stigmatised as a pale imitation of Mies's Farnsworth House. That was its precedent, to be sure, but as its own exercise in modern composition and harmony with the landscape it is something unique, a bespoke architectural environment like no other. And then there is the AT&T Building (now the Sony Building), one of the most inscrutable buildings of the last century. Was he serious? Was that wildly expensive tower an arch postmodern joke? If so, how can one explain its leaden monumentality? Here was Johnson, as ever, trying to have things all ways at once.

It is easy to forget his many successes: the series of refined modern homes that he built for his society friends in the postwar years; MoMA's sculpture garden; midtown's



ADAM HILL

great oasis; his beautifully composed Pre-Columbian art pavilion at Dumbarton Oaks in Washington, DC; and the New York State Theater, first derided along with the rest of the Lincoln Center, but now beloved as one of the city's great jewels. Then there are his two truly exemplary skyscrapers, the IDS Center in Minneapolis and Pennzoil Place in Houston – glassy modern shafts with pedestrian-friendly courts; and the wacky New York State Pavilion for the 1964 World's Fair – like nothing else in his catalogue. Do these victories forgive the mis-steps?

If there is any single characteristic that defines the architectural vocabulary of Johnson's work, it is the void. Vacant spaces appear with regularity at the hearts of his buildings, regardless of programme: private residence, office tower, public institution. The Glass House, the building that will always define him, is in essence an empty container, a simple open room, a null space.

Johnson spoke with great eloquence about the primacy of procession in architecture, of the critical importance of experiencing a building through time and space. His own work, however, is generally defined by courts and atriums and open rooms – points of stasis. He imagined these as spaces of social interaction, and at their best, when animated by a human presence, they can achieve a great energy. Emptied of that presence, they can be just the opposite – barren, inert, inhuman.

Those voids are reflective of nothing so much as Johnson himself; he was, like his architecture, a vessel always in search of an external charge. It is this essential nature that explains his history of shifting positions, his changing favorites, his obsession with the new. It is what kept his table at the Four Seasons filled, and what made the Glass House America's pre-eminent architectural salon. It is what made him vital, the secret to his longevity in career and in life.

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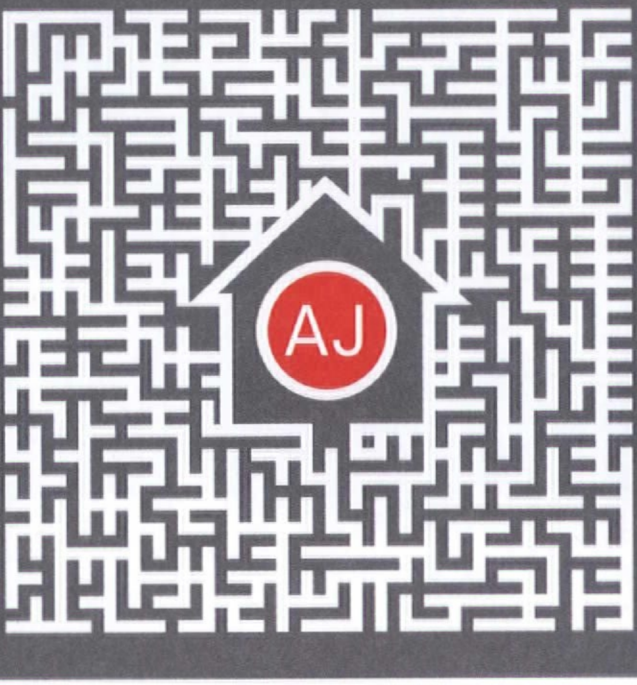

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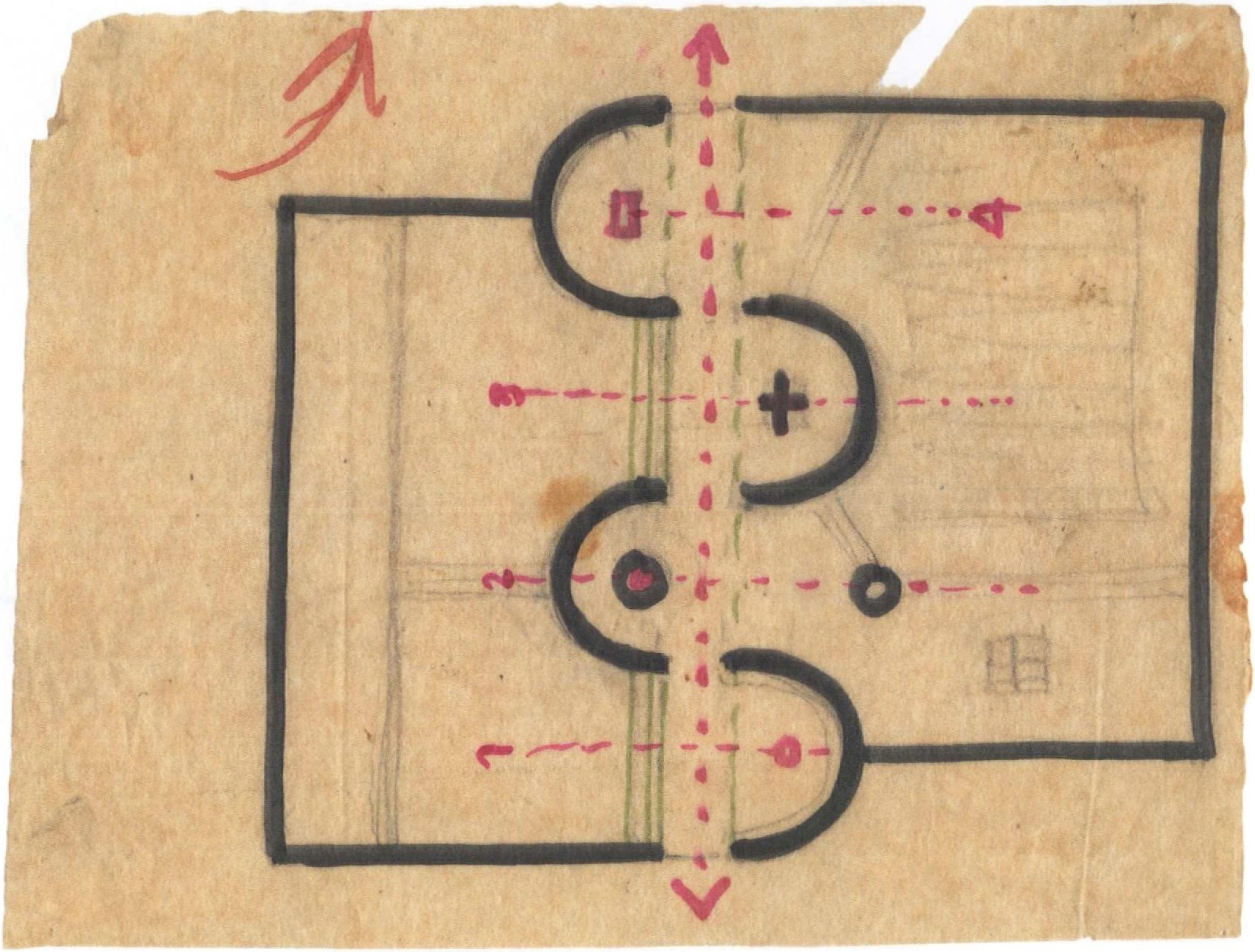

This original sketch by Aldo van Eyck is of the Catholic Church Pastoor Van Ars in the Dutch city of The Hague, a project that preoccupied him throughout the 1960s. Depicted with his strong and confident lines, the spatial organisation, the handling of scale and circulation, and the use of contemporary architectural language all capture his genius and expressiveness in design.

**Jose Fernández-Llebrez**

*Mesh: PC-Omega 1540 Architect: HPP Hentrich-Petschnigg & Partner Photography: © ARTUR IMAGES GmbH*

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