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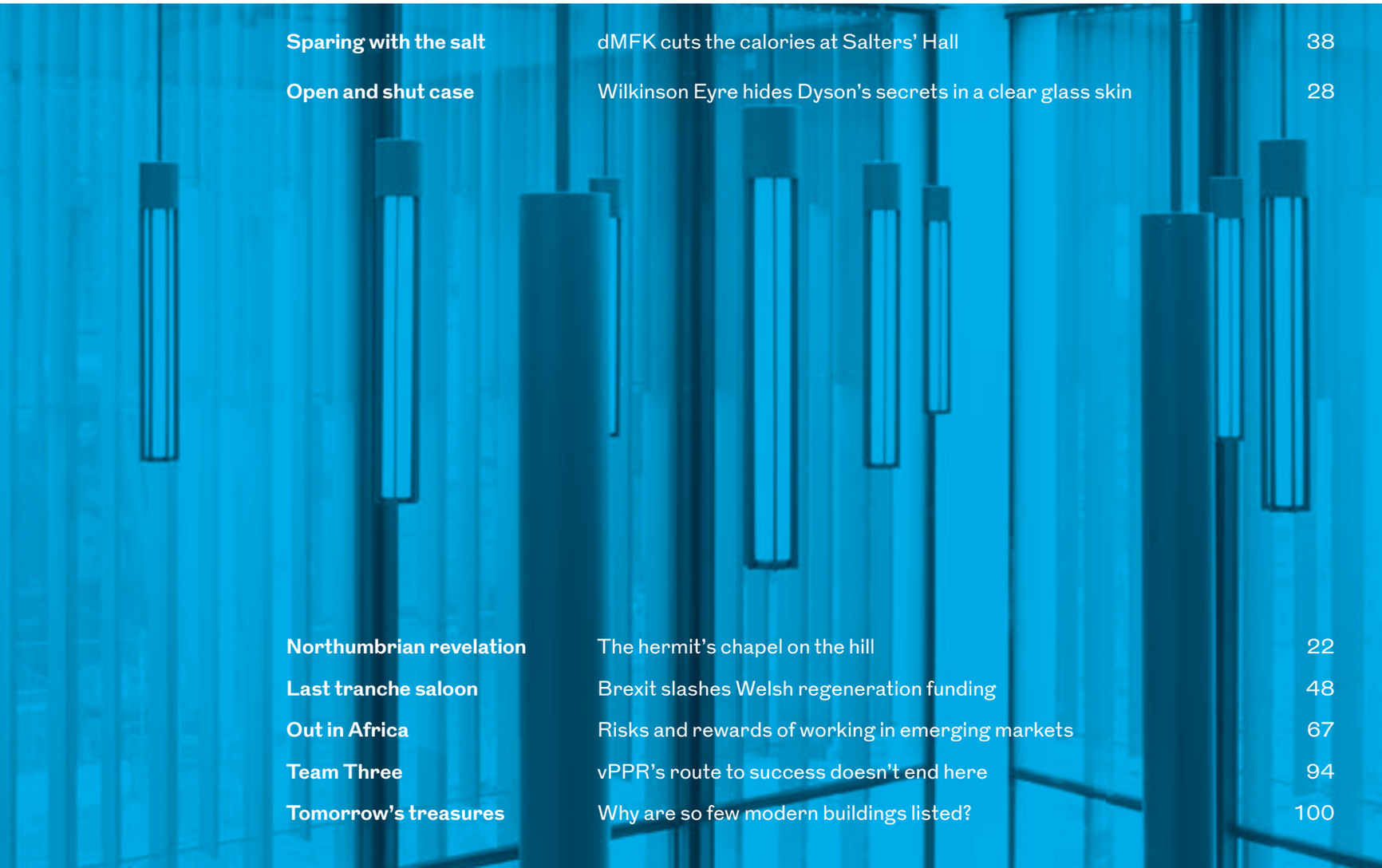
£8.95/€16/US$18

October 2016



Sparing with the salt dMFK cuts the calories at Salters' Hall 38

Open and shut case Wilkinson Eyre hides Dyson's secrets in a clear glass skin 28

Northumbrian revelation The hermit's chapel on the hill 22

Last tranche saloon Brexit slashes Welsh regeneration funding 48

Out in Africa Risks and rewards of working in emerging markets 67

Team Three vPPR's route to success doesn't end here 94

Tomorrow's treasures Why are so few modern buildings listed? 100

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1 Buildings

Comment
07
Fear and yearning for the power of water

School
08
Eric Parry strikes the right note at Brighton College

Photograph
13
Menacing teenagers give Anthony Coleman's Glasgow image an edge

Museum
16
Anne Holtrop Studio celebrates the Netherlands' historic watery defences

Chapel
22
Years of devotion are rewarding a hermit and his architect

Dyson Campus
28
Wilkinson Eyre gives a transparent cloak to the technology innovator's growing security-conscious HQ

MacEwen Award
36
Our competition is back for a second year: it's time to enter

Sustainability
38
dMFK boosts space and lowers energy costs in Salters' Hall

Hilti
44

The bricks fit together without the use of mortar, halving construction time

'Jenga' bricks challenge Mexican housing shortage: https://is.gd/selfbuildbricks

2 Intelligence

Q&A
47
GLA's Alan Benson on housing, viability and bridges

Economics
48
How has Wales used its final EU funds?

Education
54
Could linking training and practice solve our education problems?

Award
59
Charles Jencks on Niall McLaughlin and elastic tradition

Planning
62
Regeneration takes the lead in this month's planning permissions

Business
67
Working in Africa carries risk and reward but you need a local partner

Market analysis
70
Has the number of UK architects fallen or not? It's hard to tell...

Legal
75
Reputation is no protection against redress for bad advice

Office
77
Maria Smith and the mission statement

SIG Rooflines
79

On the cover
Salters' Hall by dMFK, photographed by Jack Hobhouse

3 Culture

Leader
85
Architectural debating is looking lively

Wiles & Wainwright
86
Olly Wainwright finds fame and filial filming make starchitect flops

President
90
Why teaching needs to be more flexible

Everyday glories
93
The ghostly glasshouse is more substantial than you think

Profile
94
What makes female power trio vPPR such a practice of the times, and what awaits it?

Heritage
100
Only 2% of listed buildings are post war

Review
104
Hubert Damisch's essays on philosophy and architecture

Review
106
Geoffrey Bawa's Sri Lankan treasures uncovered

Obituary
109
Peter Blundell Jones: professor, writer, historian

Exchange
110
Opinion and comment from readers

Parting shot
138
Rationalist contrasts at Baldessari's Milan press pavilion

Amtico
113

PEFC abc 27,580 RIBA Enterprises

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"We worked closely with Kingspan and the subcontractor to arrive at a technical solution that delivered on our design philosophy."

— Brian Tracey,
Director, Leslie Jones Architecture

Build Stage

Kingspan's involvement in the Friars Walk project went beyond the typical role of a manufacturer. Because of the unique design and performance specifications for the site, Kingspan was asked to work closely with the architect and contractor from day one to determine creative solutions to some of the design challenges in the brief.

These challenges included the creation of a number of bespoke ancillaries, including vertical rails for the hook-on cassettes, factory-cranked corner cassettes to give a smoother look, flashings made to match the thickness of the cassettes at strategic reveal points, and a penetrating steel fixing solution for store signage.

For the cinema building, Kingspan worked closely with the cladding contractor and the architect to deliver a colourful terracotta façade incorporating LED lighting, ensuring the building's bright design made an equally strong impression at night.

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1: Buildings

Go with the flow is not always a relaxing command. Would you be swept along by the mill race, the high drop of the dam spillway, the rapids of an Olympic white water course? Fine bullets of spray warn of the awesome power of a fast moving stream. The dribbles of modern landscape design have nothing on this invigorating sight. The exciting stuff – channelling water, capturing its power, taming it, bridging it – is normally the purview of engineers while architects are left on drip details. Carlo Scarpa might manage it in frequently flooded Venice. And in the Netherlands Anne Holtrop Studio has used the structures of the nation's water defences to tell their story while designing an outsized model showing how dykes and gates brought water gushing to Holland's defence (p16). It is hard to find such excuses, but just imagine if we could borrow the elemental energy (and jeopardy) of water.

Fort Vechten, home to the Dutch Waterline Museum.

OSSIP VAN DUIVENBODE

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At each transition there's a margin, overheads, wasted time, abortive work. All that will be swept away

Irena Bauman talks to Gesine Kippenberg about selfbuild: ribaj.com/intelligence/construction-innovation

It will enhance our understanding of sustainable retrofitting and possibilities for period properties

Tom Ravenscroft discovers age is no bar to sustainability: https://is.gd/modernlistings

Melody maker

Brighton College is the latest beneficiary of Eric Parry's growing speciality for music schools

Words: Isabelle Priest Photographs: Hélène Binet

Eric Parry Architects is developing a niche for music schools. First there was Bedford School Music School in 2005, and now music schools at Wells Cathedral School and Brighton College have finished almost simultaneously. This is the new Brighton College Music School, which opened earlier this year and is the first phase of a larger performing arts centre that will complete in 2021.

It is part of a decade of transformation instigated by headmaster Richard Cairns which includes two buildings by Allies and Morrison, a design technology and English block by Kirkland Fraser Moor (KFM) and an academic building under construction by Hopkins to an earlier masterplan by also by KFM. The future drama section will begin on site after OMA's upcoming combined sports and science building finishes and demolition of the science block, alongside which the new music hall stands, has taken place.

This part however, still a 1130m² project, does stand alone as a commendable piece of architecture that squeezes into the site for the time being but will flourish when the overall project is unveiled later.

For the moment the music school nestles on the inside of an L-shaped dining complex slipped between the original college buildings and the bank of the playing fields behind. Having been relocated itself from premises off the main college grounds, it sits on the site of a former tuck shop, toilet block and squash courts, which rather wastefully were restored with a £40,000 donation from an old boy only three years before the launch of this competition in 2010 to demolish them.

As part of the scheme, the dining hall was refurbished and a new entranceway created from the original Gilbert Scott quad building into the small courtyard that fronts the building. It is intended to enlarge the courtyard in the second phase of works.

From here the only signs of a completely new building are the two-storey stone-clad and curved glazed corner that protrudes 9m from the science block. And it is revealing of the squish that this is not really where my tour began. Rather the building's true elevation is an entrance-less gable end one storey up on the bank to the rear, and which is best appreciated 100m onto the cricket pitch. From here the building shows its elegant composition and main purpose: an 11m wide by 11m tall by 15m deep, 195-seat recital room with a fully glazed end overlooking

Opposite The recital hall window overlooking the playing fields is high performance to resist cricket balls and create acoustic separation.
Below The colourful panelised diamond tile roof takes its cues from Hôtel-Dieu de Beaune and other Burgundian architecture.
Right The percussion room, tucked away behind the recital hall, is day lit from above and heavily soundproofed.

IN NUMBERS

£5m
total contract cost

1,134m²
gross internal area

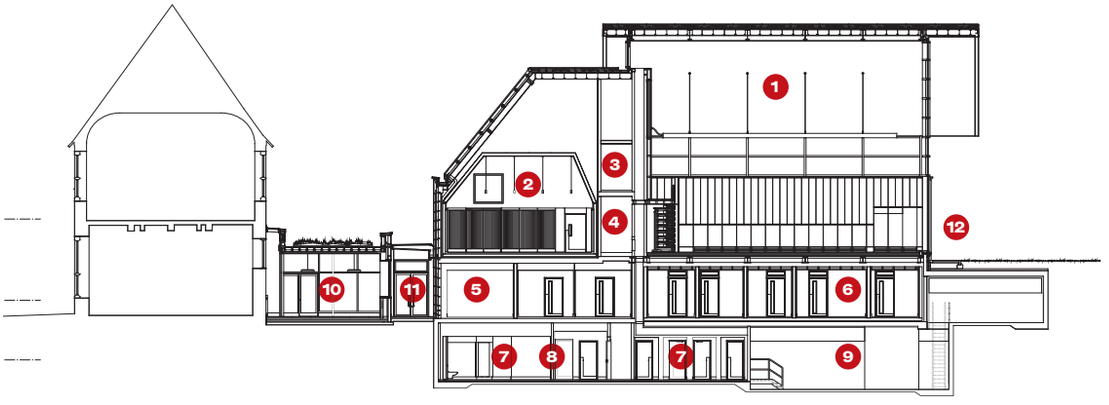
7.45
kgCo²/m²

Excellent
BREEAM review

Section

Key

1 Recital hall
2 Percussion room
3 Control and equipment box
4 Store
5 Lodge and head of music's office
6 Practice rooms
7 WCs
8 Lobby
9 Plant
10 Dining hall
11 Covered corridor to dining hall
12 Playing field



Below right The winding steel stair overlooks the courtyard by the main entrance, its underside painted bright red.
Below left A heavy wall processes air at the back of the recital hall and contains the control room. Gills along the walls can be opened to create different acoustic environments.

Credits
Client Brighton College
Architect Eric Parry Architects
Structural engineer Momentum Consulting Engineers
Main contractor R Durtnell and Sons
Mechanical and electrical engineer Skelly & Couch
Acoustics Gillieron Scott Acoustic Design
Theatre consultant Charcoalblue
Quantity surveyor Academy Consulting
Fire engineer The Fire Surgery
Approved inspector Butler and Young
Planning consultant Nathaniel Lichfield & Partners

the playing fields, its colourful chevron tiled roof floating above its stone walls on clerestory windows.

What appears from this aspect to be a single room building in fact tucks in a whole music department beneath, including a corridor of practice rooms, reception/lodge and head of music's office, as well as a control box, percussion room and processional steel stair.

Most impressive is the commitment by the architect to making a technically excellent environment for the appreciation of music largely without exposing it in the architecture. It involved sizeable air handling plant, acoustically separated floors between rooms, specific build-up in the glass, internal shutters, thick walls and deep sills, gills integrated into joinery and masses of insulation, particularly in the roof, which unfortunately is the only aspect of the project which could perhaps have been finished more delicately.

But inside, a neutral colour scheme leaves the aesthetic stage clear for the music that will be made here to fill the space.

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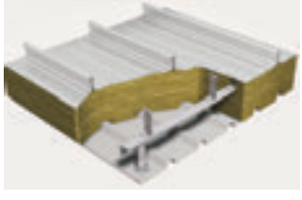

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Clydebank workshops, Glasgow
Photograph Anthony Coleman
Words Jan-Carlos Kucharek

Anthony Coleman remembers the winter morning in 2006 when he flew to Glasgow, sunning himself high in blue skies before descending through a blanket of cloud and making his way through damp fog to Gordon Murray's and Alan Dunlop's new Clydebank workshops for a shoot. A regeneration project on the city's western edges, the place was empty when Coleman set up his camera outside.

'The kids just came out of the fog,' he recalls. 'They felt quite intimidating, as teenagers can – but I felt it best to go with the flow.' That was to diffuse the situation by putting the curious boys in the very frame they were interrogating. He was low on film and found himself resenting that three of the shots had been wasted by the gang showing the finger; but come the fourth, he says, even they momentarily tired of the high jinx.

'In the last shot they suddenly all seemed to stand still and stare at the camera. One boy's face is blurred but I can live with that.' At a time when photographers shifted from notions of architecture in splendid isolation to be inclusive of users, this image stands on the fringe of even that – Coleman will never know if any of these locals ever ended up employed in the workshops. It merely records a brief interaction between five kids and a stranger on a street corner; the building as immaterial as the Scotch mist renders it.

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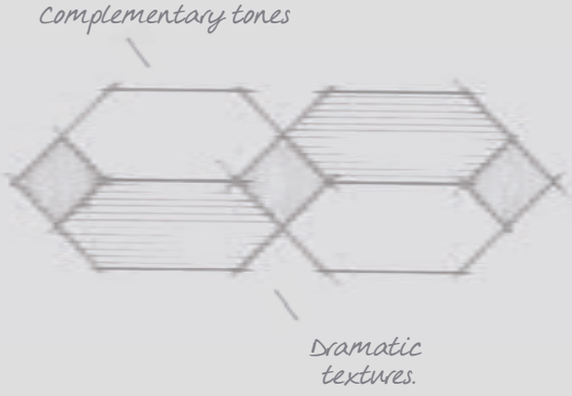

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The Netherlands' intriguing Waterline defence system is celebrated in Anne Holtrop Studio's museum, which ebbs and flows with its setting

Words: Isabelle Priest Photographs: Bas Princen

IN NUMBERS

£6m
total cost

2000m²
gross internal area

54m
long model

In a country with a small population and a flat topography, the Netherlands has struggled throughout its history to defend itself from the invading forces of larger countries: France, Germany and Spain. Without natural defences, the Dutch had to come up with innovative defence solutions. They built fortresses and fortified cities, but arguably their most unexpected weapon was water.

The Netherlands is well known for its relationship with water. No less than half the country is continuously threatened by it. One quarter lies below sea level and another floods whenever its major rivers burst their banks. However, the nation has made friends with the water and has at times opened its locks and breached its dikes deliberately to keep other intruders at bay.

MIKE BINK FOR DUINZAND

This unique defence system is called the Dutch Waterline – and consists of several different frontiers planned and built at different times but formalised in the early 17th century by William of Orange's sons. Water would be knee-high: too deep to wade through and too shallow for boats. Where the barrier was at its narrowest forts were constructed, armed with cannons.

In theory the Waterline was simple, but in practice, given that it concerned a significantly large area, it was complex. Sluices had to be opened and dikes breached in just the right places, after which it would take at least a week before the water was high enough. What's more, home troops had to make sure farmers, whose harvests would be lost, did not sabotage the operation.

As a result the Dutch Waterline was rarely implemented. The Old Dutch Waterline was put into operation twice, both times against the French. It kept them at bay in 1672, but in the winter of 1794/95, the water froze so hard that they crossed the ice and occupied the country.

The New Waterline, established in 1815 by King William I to renew and extend the old one after 18 years of French occupation, never saw any fighting. It would effectively turn the western regions into an island. The biggest and most expensive project ever undertaken in the Netherlands, it stretched

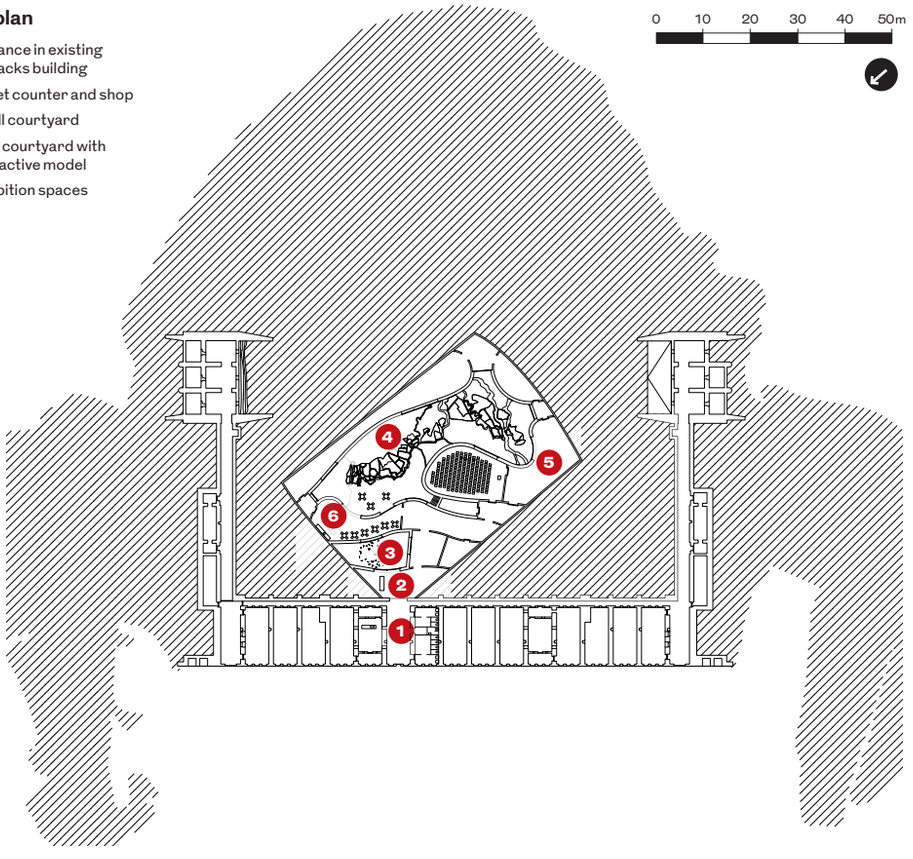
Opposite The interactive model with its bronze cast forts as seen from the building's green roofscape. The way its sluices can be opened and closed was unique to Holtrop's proposal for the model aspect of the brief.

This page Exhibition spaces flow effortlessly around the courtyard culminating in the café and door to the outside.

The Province of Utrecht opened a competition for a museum to tell the story of the defence line, restoring not just the fort but possibly some of the Waterline's national reputation too

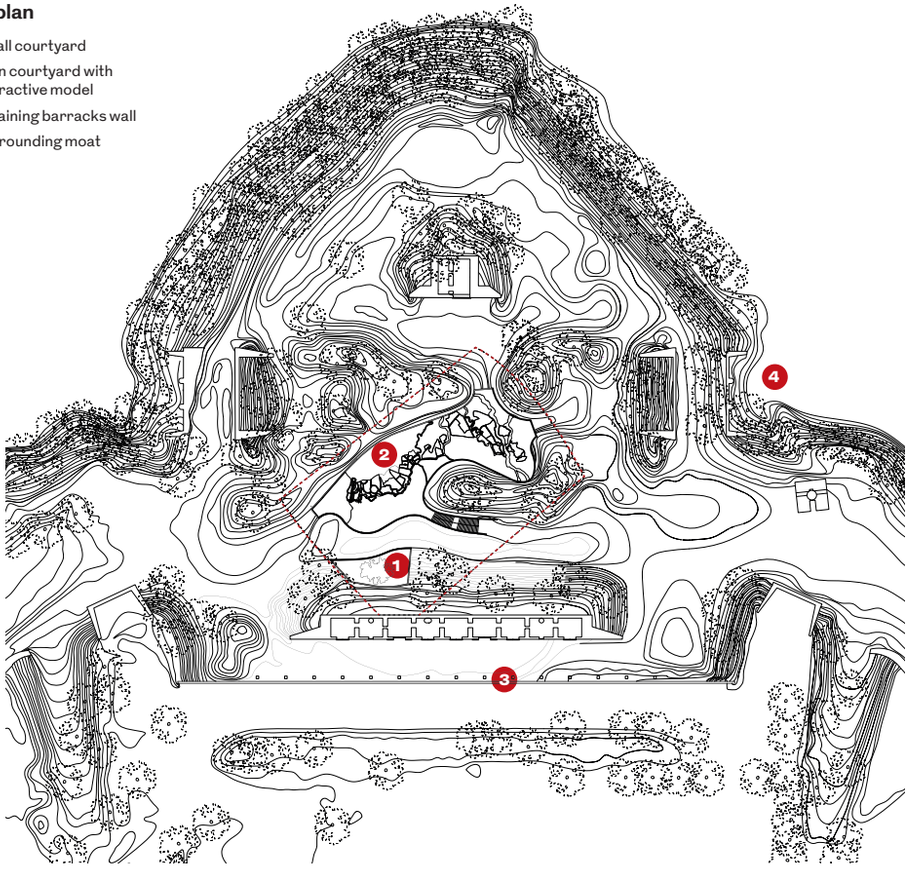
Floor plan

1 Entrance in existing barracks building
2 Ticket counter and shop
3 Small courtyard
4 Main courtyard with interactive model
5 Exhibition spaces
6 Café



Roof plan

1 Small courtyard
2 Main courtyard with interactive model
3 Retaining barracks wall
4 Surrounding moat



85km and was prepared for use three times, coming to nothing on each occasion.

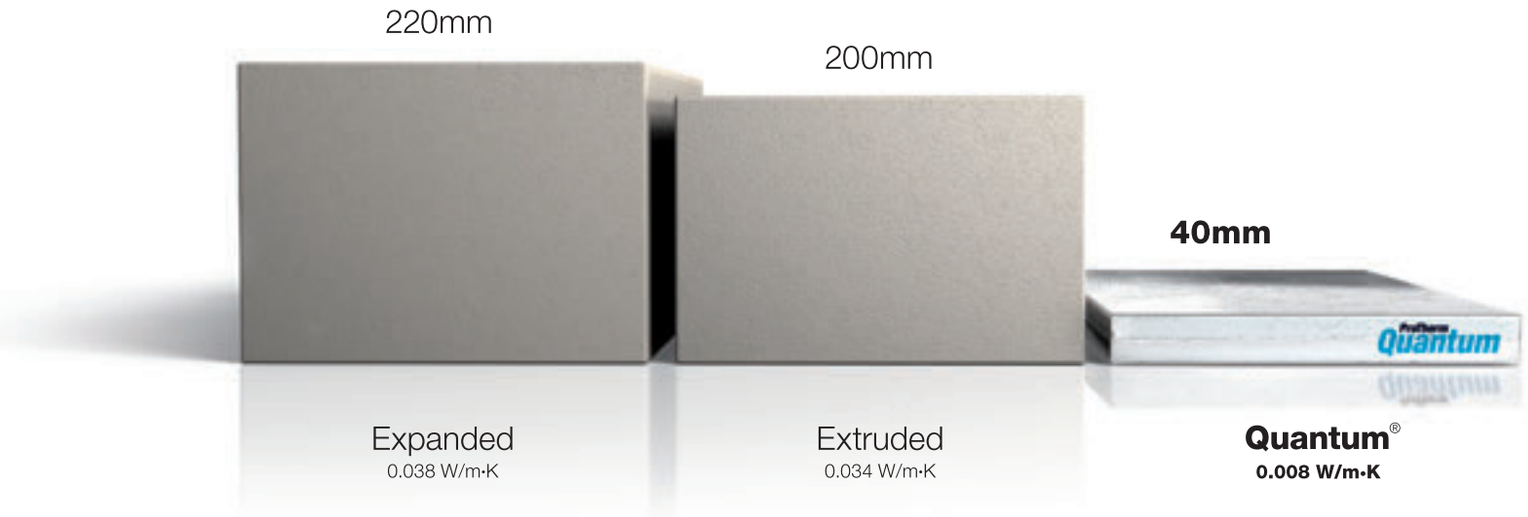
Subsequently something of a white elephant and national joke, the Dutch Waterline, in particular the New Dutch Waterline, is the subject of this new museum by Anne Holtrop Studio. Near Utrecht, the building sits in the ramparts of Fort Vechten, one of the larger of the 40 fortresses and six fortified towns.

The museum is part of a bigger plan for the site, which had been decommissioned in 1951 and left to nature or occasional parties. A landscape design by West 8 was already under way by 2010, when the Province of Utrecht opened a small invited competition for a museum to tell the story of the defence line, restoring not just the fort but possibly some of the Waterline's national reputation too.

Invitees had to be aged under 40. The building had to be submerged, had to be entered via the existing barracks and would cover 2000m^2 including an auditorium and a model map of the Waterline.

Holtrop's winning proposal was to let the heights of the site inform the shape of the building, burying the museum spaces in voids created beneath. In places these are punched in to create two freeform enclosed courtyards

Lower your expectations.



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in the centre, the largest displaying a playful interactive model of the Waterline.

In plan, the new museum touches the existing building only lightly at the entrance and is otherwise a near rectangle placed on a slant within the old fort construction, which is not discernible from either the exterior or inside. The architect didn't change any of the heights to make them nicer or more appealing, and there were no concessions on the concept, even though it was Holtrop's first permanent project. Starting with the reception and shop, the exhibition spaces ramp up slightly and wrap around the main courtyard, cut and varying in height according to the original topography of the site above.

Huge brass-framed windows, filled with curved glass and slotted into a full concrete construction, bring light to these otherwise buried spaces while connecting with a scaled interactive model of the Dutch Waterline built into the fabric of the courtyard outside. Interior and exterior walls and floors are the same brown tinted concrete – which breaks with the white walls of museum and heightens the subterranean feeling – accentuated by a rough sandblasted texture and faint differences in layers as it was poured. In the landscape above, the building emerges only as a continuous concrete balustrade around the courtyards, making it a discreet and intriguing addition to the landscape. ●

See more images at ribaj.com

Above Huge picture windows with brass frames connect the exhibition inside with the model of the Dutch Waterline.

Top right Exhibition spaces are tucked under the existing rolling topography of the site, with only the courtyard visible from above.

Right The interactive model is operated by miniature sluices that can be controlled to flood certain areas. Water is continuously pumped around so new visitors can play.

Credits
Client Province of Utrecht
Architect Anne Holtrop Studio
Structural engineer Corsmit
Exhibition concept Duinzand
Masterplan Rapp & Rapp Architects and West 8

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Keep the faith

It looks as though it's been there for centuries, but this chapel is the most recent manifestation of one man's mission. One man and his architect acolyte

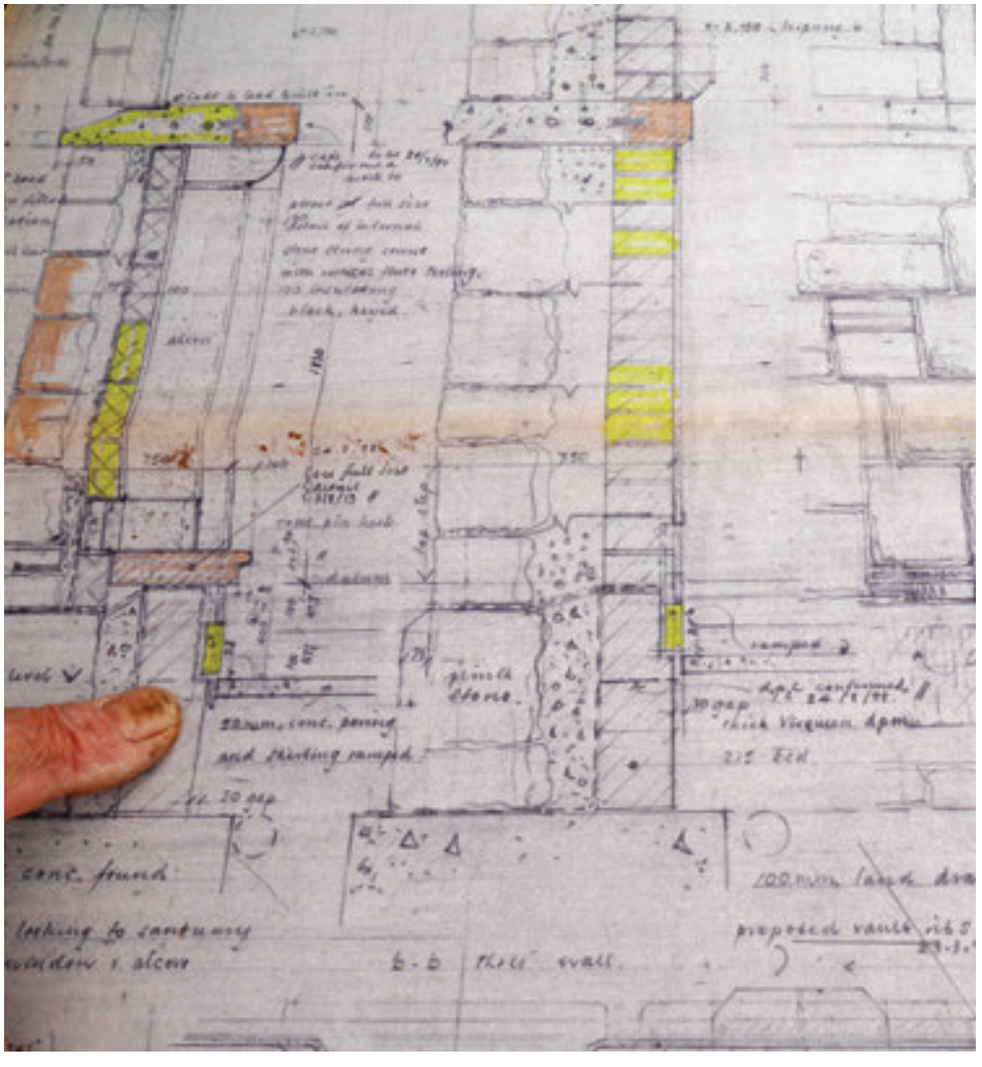
Words and photographs: Hugh Pearman

Right The chapel of Shepherd's Law in Northumberland recalls an earlier age and is still a work in progress. Architect Ralph Pattisson paces out the site. To the left is the incomplete but functioning bell tower.

You could call it slow architecture, you could call it self-build, you could even call it upcycling – and of course religious. But how about Romanesque? A new chapel in the Romanesque tradition that looks as if it has been there for centuries? Such is the chapel at Shepherd's Law in Northumbria, in the hills looking across to the Cheviots. The client, Brother Harold, is a hermit. The architect, Ralph Pattisson from Newcastle, has worked on the Shepherd's Law settlement for more than 30 years. It is not finished yet.

This little chapel came to my notice because late last year it jointly won the ACE/RIBA Award for Religious Architecture – in the process beating into second place the much better known, Stirling Prize-shortlisted Bishop Edward King Chapel at Ripon College outside Oxford by Niall McLaughlin Architects. That in itself makes it interesting, as does its determinedly traditionalist style, but what intrigued me more was the way the building came into being. It is a unique client-architect relationship.

Pattisson collects me from Newcastle station and we head up into the hills. In the lane below the settlement, he produces a sheaf of plans and spreads them out on the car bonnet. Everything is hand drawn and many of these drawings are old and yellowing. There is a masterplan: a cloister will eventually link the buildings. He has come to measure up for the first part of this, leading from the hermitage to the chapel. We set off up the hill past grazing cattle and sheep, and through a farm gate between ruined walls into the



Brother Harold has visited Le Corbusier's chapel at Ronchamp, and taken something from it: the gently sloping floor to the nave, which, ending in a shallow step, helps to define the interior

Left Hand drawn and hand made over many years, this is architecture as it used to be.

Above Architect and client: Ralph Pattisson (left) and Brother Harold.

Left The chapel nestles into the slope in a one-time farmyard.

Below A sophisticated interior with finely made furnishings and an altar modelled on Roman precedents.

overgrown courtyard. You expect chickens: instead, a hare suddenly starts up from beneath the little steel-and-timber belltower and dashes off.

Brother Harold, a Franciscan, has founded a contemplative settlement of a kind that is rare in the UK but, as he points out, has precedents in Eastern Christianity, such as on Mount Athos in Greece – the tradition of 'sketes' or mini-monasteries with maybe half a dozen inhabitants. 'I am a hermit, but not a solitary,' he says as we eat our sandwich lunch round his kitchen table. 'There is a small community here.' He found the site in the early 1970s – previously a farmstead, with some relatively ornate stone ruins suggesting it could have functioned as a shooting lodge. He established his tenancy, at first living in a caravan, then building his hermitage with his own hands. In the 1980s, legacies meant he could build more, and Pattisson arrived as architect to design a short terrace of monkly cells for visitors, who typically come on retreats. Finally came the chapel, replacing one Brother Harold had, and still keeps, in the pitched roofspace of his hermitage.

The walls are nearly a metre thick and the chapel includes a lot of reused stones from demolished farm buildings, including four stout pillars at the crossing. Pattisson includes fragments of brick among the stones on the exterior to enliven it, with locally handmade thin bricks defining the arches. In places moulded concrete is used and con-

Above Looking back from the apse through the ciborium: all self-finished materials.

Above Thick pieces of locally-made glass provide intense highlights.

cealed beneath everything is a lot of blockwork, which also forms the interior barrel roof of the chapel, finished in a cream render. Nothing is painted.

It works well as a composition and sequence of four internal spaces culminating in an apse behind the altar. There are enough of those tiny windows with very deep reveals to make it surprisingly light. Brother Harold has visited Le Corbusier's chapel at Ronchamp and taken something from it: the gently sloping floor to the nave, which, ending in a shallow step, helps define the interior. It takes congregations of up to 50, led by ministers who can be Anglican, Roman Catholic or Orthodox: Brother Harold himself, not being ordained, sits in the congregation.

It's not completely homogenous as a work: the dressed, radiused stones to the exterior of the apse, for instance, look a bit too fine compared with the rougher stones of the flanks. A low lean-to beside the entrance porch, I think containing equipment for the propane-powered underfloor heating, is somewhat intrusive. The furniture, including the ciborium, is designed by John Sanders of Simpson and Brown in Edinburgh. Again, it's perhaps too sophisticated: in this context I had expected rougher and readier work.

But perhaps I am bringing my metropolitan, faith-free attitude to something which is above all a matter of deep faith, by the architect as much as the client, making an interior which is in its way miraculous. Brother Harold is now in his eighties and his architect is not a young man either, but both see the Shepherd's Law settlement continuing. There are trustees who oversee it. And as an incident in this glorious landscape, well – from a distance you would think at a glance that it was a farm, as indeed it once was. It very much deserves to be there.

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Open secret

Despite all that glass, there are parts of Wilkinson Eyre's latest additions to the Dyson campus that are strictly off limits

Words: Eleanor Young

Get the light right and the D9 building becomes one giant mirror. The Lightning Café is to the right.

If you know someone who works at Dyson then you will know about it. They will have told you. Or their mum and dad will. Even if they have to keep what they're working on secret. It's that sort of company – radical inventor injects life into British engineering, and makes everyday objects a little bit more exciting. You may not know anyone who works there, but you have probably specified one of the company's hand driers. Chris Wilkinson and the team at Wilkinson Eyre score on both counts. Wilkinson has been working with James Dyson for 20 years, turning part of an industrial estate just outside Malmesbury, Wiltshire, first into a manufacturing facility and headquarters and now into a high-tech campus – high-tech both in its architecture and what goes on within it.

As for the secrecy… will I get to see what the future holds on my visit? We'll come to that. First let's look at the architecture and, because this is what visitors see initially, the car park. Once you are past security it is almost hidden, the hedges now maturing – think upmarket business park, the landscape here and everywhere on the campus having the air of being managed by the National Trust. Neat crowns of small trees sit alongside the mirrored glass of the entrance building, its wavy roof bobbing gently above them. The idea was that it should float, says Wilkinson of this early building. The glazed entrance pavilion lies across a glass bridge spanning a pool of water that was once dyed purple, a trademark colour for the first Dyson products.

Chris Wilkinson was introduced to James Dyson by engineer Tony Hunt. Wilkinson had just written Supersheds (1991), and this long span, large

Below Original Dyson campus headquarters where the supershed has been proved to flex as needed.

volume building type has proved as ubiquitous as he predicted – not just in its beautifully engineered form but also in panellised inevitability at city edges and motorway hubs.

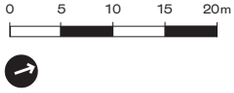
Other examples of the genre include Foster's Renault distribution centre nearby in Swindon, now partly a children's play space, and Grimshaw's Financial Times printing press in London's Docklands, later converted to an internet switching centre. This early Dyson building has also shown itself as flexible as Wilkinson had hoped. It started as a small conversion, then was extended and extended on that 3m grid set out by Hunt. As the company has grown and its manufacturing shifted to Malaysia, sections of the building have been reconfigured: loading bays converted into offices.

This latest collection of buildings draws on the same language. When Wilkinson, a veteran of Lloyd's from his time with Richard Rogers, discussed the buildings with his rather younger team he advised them to research high tech. The three principal buildings are distinguished by large panels of glass, elegantly and almost invisibly put together, and powerful rooflines.

The new research and development building (D9) sits alongside the new Lightning Café. They are separated by a friendly and busy tree-studded street with a loop of nature walk thrown loosely around them. These two extend the original site westwards behind a hedge-topped bund and towards the third newcomer, the Hangar, a sports pitch and gym building which lies beyond the security fence at a more public entrance to the site.

Left Inside the Hangar, sports pitch and gym.
Below The Hangar is spare in form.

Section A



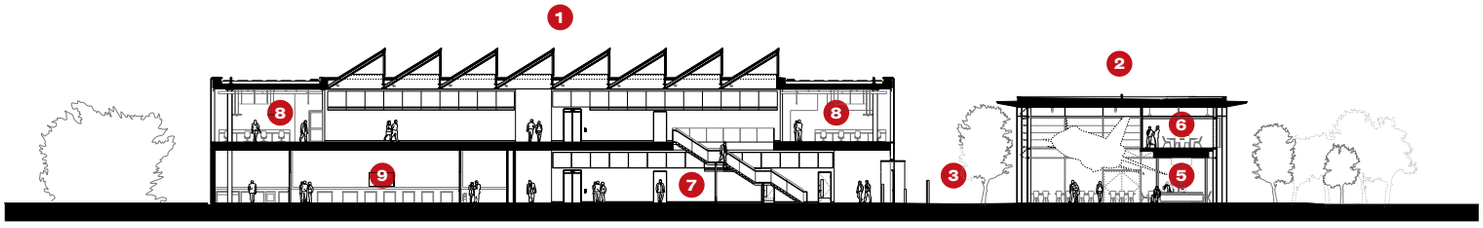
IN NUMBERS

9000m²
D9

1200m²
café

700m²
energy centre

1600m²
The Hangar



The turf-covered Second World War hangars of RAF Hullavington lie just south of Dyson HQ, and of course James Dyson has a penchant for planes and flying machines which he indulges at points around the campus – part museum display, part public art (and a space for his own helicopter). So a hangar, this one aluminium, seems an apt form, an efficient and economical covered space without pretension.
The 3,000 Malmesbury employees ensure it is well used, and it is a place that locals could also make use of. It's a shame that the one piece of architecture Dyson offers up to public view is the cheapest and tinniest of its buildings. Despite the discipline exercised inside on the coordination of services, the aluminium standing seam marks it out as a utility building.

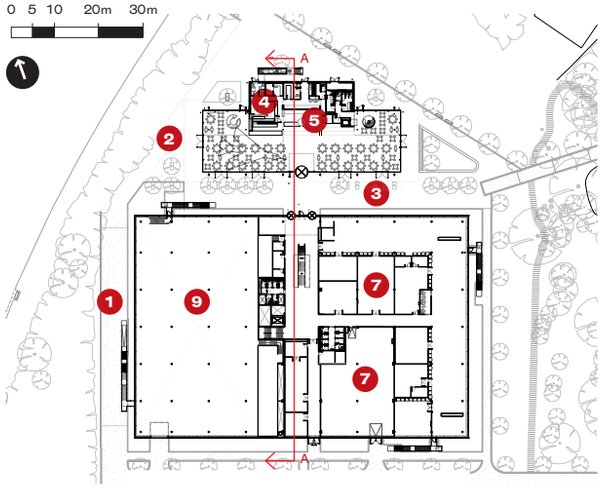
Not surprisingly, the real investment has gone into D9, the laboratory building for research and design development. Encased in a rigorous glass envelope, its sealant is piped in perfect lines, and the top of the building is a sheer slice across the glass. Wilkinson says he imagined this campus rather like Mies van der Rohe's IIT campus in Chicago, a comparison without hubris. But what captured my imagination were the external escape stairs. By doing a little dance of celebration between ground and air, they relieve the box from a certain harshness. The stairway's design is sparing, its two columns pared to 89.9mm diameter, but the balustrades cant inwards a little and criss-crossing supports underneath create energetic filigree.

But let's not get carried away. This is a building non-disclosure agreements were made for, the 'secret labs' of the Dyson supersonic hairdryer ads, where hair is examined under the microscope, where floor cleaning

Key

1. D9 research and design development
2. Lightning café
3. Street
4. Kitchens
5. Servery
6. Meeting rooms
7. Labs
8. Write up space
9. Testing
10. The Hangar
11. Energy centre
12. Existing buildings

Ground floor plan



Masterplan

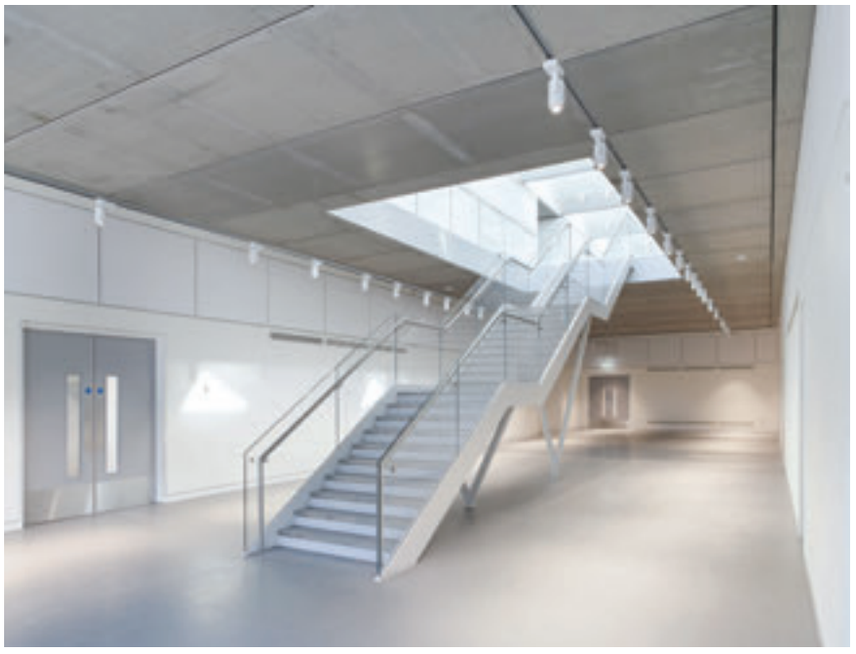
This is the building non-disclosure agreements were made for, the 'secret labs' of the Dyson supersonic hairdryer ads

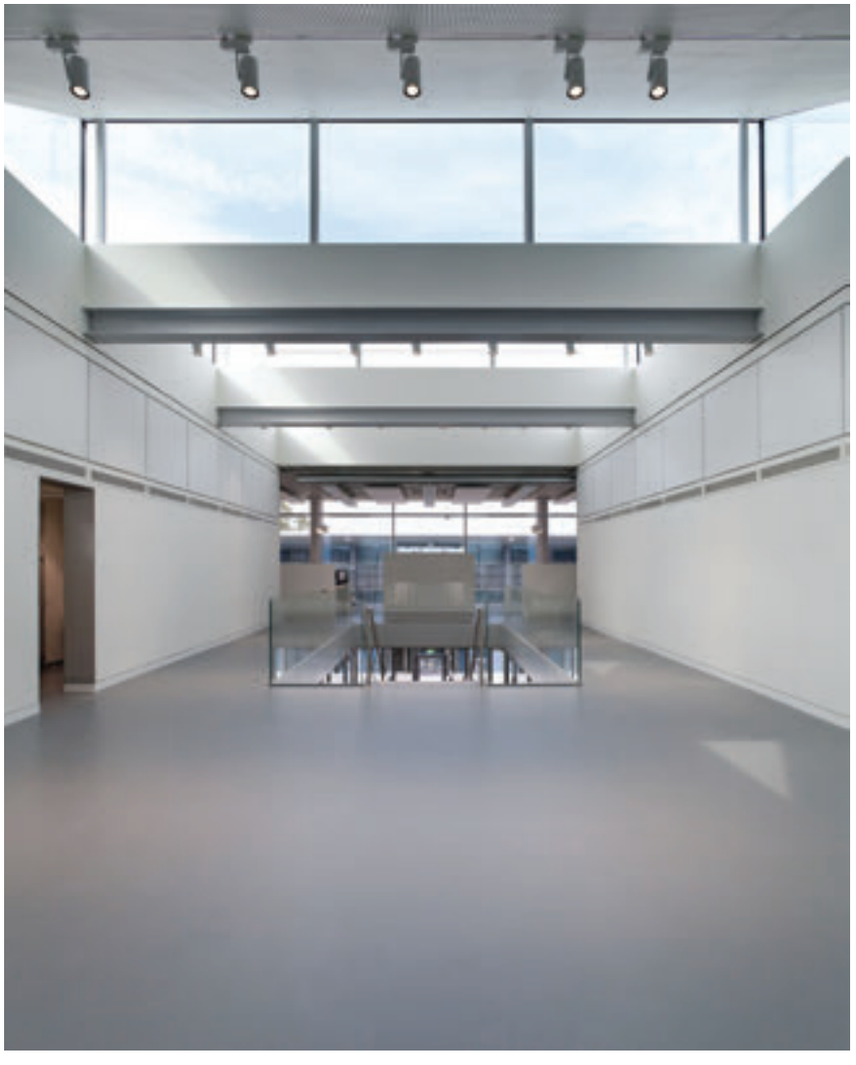
Left Dyson base becoming a campus: between D9 and Lightning Café. Nice space but you can't help but focus on the staircase. **Bottom left** Looking into the Lightning Café: the knocked back palette is given a pink kick.

devices are tested and where fluid mechanics meets product development in the creative fusion of hundreds of ideas. Or so I am told. Jake Dyson, lighting designer son of James Dyson and heir apparent, explains that only proposals that perform 5-10% better than what is already on the market get through to development. Dyson fiercely protects those ideas: careless whispers cost the company. This building is designed to guard against that, with no accidental views afforded to staff outside the core team. As we walk around, members of the team keep ahead of us, checking that areas are clear. The cavernous ground floor takes a few minutes to check, even though the testing units are not yet installed.

Here the engineers have small structured teams targeted at a 'vision spec', Jake Dyson explains. They work predominantly in the labs in the centre of the plan, encased in a 'fat' wall of services. We journalists are not allowed in there. Nor are other members of staff unless specifically invited. I am assured that the fit-out of the labs are quite ordinary – but their contents are not. Outside the labs there is a wide central spine and lofty write-up spaces for the engineers.

Below the concrete soffit a minimised suite of services sits alongside active chilled beams. Two thirds of the company's work is with air flow, and achieving 100% fresh air was a target set by James Dyson himself. His son Jake is particularly delighted with the prototypes of his lights. 'My ambition was to make lights to look like floating satellites,' he says. His CU-Beams are intended to create focus lighting around tasks, with an adjustable beam and an ambient uplight. They add great delicacy and precision to the space, even if, as singular objects, they seem awkwardly technical.





Left Inside D9. Each staircase is a work of engineering but also suggests something of a gallery.

Bottom left North lit central spine circulation in D9.

Credits
Client Dyson
Architect Wilkinson Eyre
Main contractor ISG
Structural engineer and M&E consultant Buro Happold
Lighting Jake Dyson

Along with the Dyson Airblade taps (look, no drips on the walls) they could point to a kind of future for high-functioning commercial buildings.

Staff can relax in the more playful Lightning Café, where supersonic-pink Jacobsen chairs are dragged out into the street on a fine day. The glass facade is topped with an oversailing roof, a detail all too often unpleasantly chunky in profile but here elegantly slim. A first floor block of meeting rooms sits over the servery, while the kitchen protrudes at the back to accommodate the space required for preparation of 1,000 covers a day.

Circular shapes and cut-outs at either end of the building are echoes of the first Dyson vacuum cleaner, the Cyclone. The geometry is dynamically disrupted by the suspended English Electric Lightning jet that gives the café its name, its wings skimming the walls of the space. The swirl of the spiral staircase (one of the circles) seems attractively ordinary but again is done with an outstanding rigour.

Wilkinson Eyre associate Yasmin Al-Ani Spence handles everything Dyson, from D9 to the energy centre on the campus and 'Dyson Demo' shop in Oxford Street, and must be responsible for much of what we see. But she points to the detail- and design-focused client, James Dyson, who would – and did – discuss everything down to the type of trays in the café, and contractor ISG which has been on site since the earliest projects.

So no industrial secrets to share, no revelations about what market Dyson plans to spring innovation on next. But this is a good injection of the best of British design and engineering: two excellent, rigorous buildings, with inventive sparks, on the edge of a market town in the British countryside.

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More ethics than aesthetics

After last year's success, the 2016 MacEwen Award for projects with social responsibility is open to entries

The RIBAJ MacEwen Award recognises 'architecture for the common good'. More ethics than aesthetics, as we say. We look for buildings, places and spaces that actively benefit society as a whole, and we are very relaxed as to how you define that. Its first year was a great success – see the results in our February 2016 issue. Now we're calling for entries for MacEwen's second outing. You can nominate your own project, or someone else's, and it is free to enter. The deadline is Monday 7 November. Don't delay, get going!

When we launched the award last year, we described it as a 'journalistic investigation', because we really didn't know what kinds of buildings and places would be put forward. We named it after Malcolm and Anni MacEwen – he a campaigning journalist and 1960s editor of RIBAJ, she a pioneering conservation-based town planner, together a formidable married team who tackled urban, rural and 'sustainability' issues before the word was in common use. The profession and beyond leant strong support for the idea. Would anyone enter? Oh yes.

Now, as then, we want projects 'with clear social benefit, right across society', the work of not only of architects but engineers, landscape architects and town planners. We like joy, fun, pizazz, and plain design talent too.

Last year's entries broadly fell into seven categories – housing, education, social enterprise, alternative workplaces, rural initiatives, youth/play centres and public spaces. The overall winner was a 1980s Segal-method office building taken to pieces, transported across London and reassembled by volunteers in a different form to become the Oasis Children's Venture – all under the direction of architecture students (now architects) Benjamin Barfield Marks and Matt Atkins. Safe to say there won't be another one like that along for a while. So we're not prescriptive. Surprise us!

RULES

Projects must be in the UK and Ireland, must have been broadly physically completed within the two years to 1 November 2016, and must not have been entered for the MacEwen Award before. A phase of a longer-term project is eligible. Anyone may enter a project, but an architect must have been involved as part of the design team. The number of awards and commendations given will be at the judges' discretion, and published in the RIBA Journal.

Information required

- Name, location and description of project (300-500 words) explaining the beneficial social impact of the scheme.
- Credit list of consultants and clients
- Maximum of six images, to include photos and drawings

Deadline for submissions: Monday 7 November, 2016

Download the entry form at ribaj.com/macewen

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Saline solution

The Salters' Company is savouring lower energy bills and greater lettings income thanks to dMFK's £12m refit and extension of its livery hall

Words: Jan-Carlos Kucharek Photographs: Jack Hobhouse

Below Salters' Hall looking from the Barbican south to London Wall. Refurbished and expanded, Spence's building is now fit for the 21st century.

Left The new Salters' Hall reception, looking north. Now flooded with light, it greets the visitor with a rich palette of ash and travertine with elegant, slender light fittings.

The result of an architectural competition in 1968 that featured Mies van der Rohe on its shortlist, Sir Basil Spence's winning entry for a new livery hall in the City of London would be the fourth built version for the Salters' Company, but the architect's last commission – Spence would die in 1976 and the building would go on to be completed by the John S Bonnington Partnership. Sitting just south of the Barbican complex, it cuts a strange figure; a concrete frame, with dark aluminium bronzed glazing and clad in stark blank-faced ribbed, knapped or bush hammered concrete, the Salters' Hall is most marked by its upper levels. Here, Spence decided to cantilever the slab out from the 5th floor and top off the composition with strange octagonal concrete towers. The building embodies Spence's signature style, reinterpreting classical language in modernist idiom to fuse a form of functional picturesque. But looking out to London's Roman wall, it's a hulking thing – and not just for its saline associations – considered by some as something of a Marmite design.

Perhaps this was partly why the Salters sought to remedy the image of the hall. With its charitable funding providing scholarships to a new generation of scientists, the Salters wanted to ensure the building maintained itself as a future revenue generator and presented an outward-looking face to the City and the public; they also wanted to haul their poorly performing 20th century building firmly into the 21st in terms of sustainability. They appointed de Metz Forbes Knight in 2011 to put forward a proposal to modernise the building and its beautiful ash-lined meeting hall, by noted 20th century British designer David Hicks. That process has just completed; and includes a new double height reception box structure appended to the building's eastern side, replacing a garage block.

Partner Julian de Metz explains that what the firm took on was a building that was failing on a daily basis: 'The cladding was leaking as well as the roof,' he says. 'Both were in need of replacement and air conditioning units and boilers were beyond their useful life. To make the refurbishment viable we came up with the idea of extending Spence's floor plates, filling in the undercroft and generating more tenant area to pay for the new works.' This modification strategy, along with that for building servicing, has not only increased the lettable area but improved performance from an EPC of bad D to B, earning it a BREEAM Excellent rating.

The original design proved interesting if problematic. De Metz says Spence decided to 'buck the trend' and reverse the traditional livery hall layout, elevating all the formal functions of hall, council chambers and masters' quarters to upper levels and placing administrative and rental offices on the lower. Novel perhaps, but it left the ground floor entrance from the undercroft dark and unwelcoming. While dMFK partner Ben Knight

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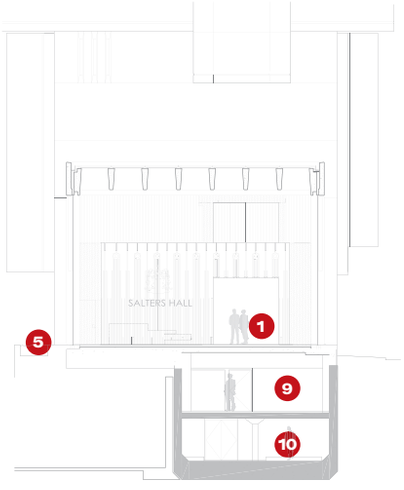
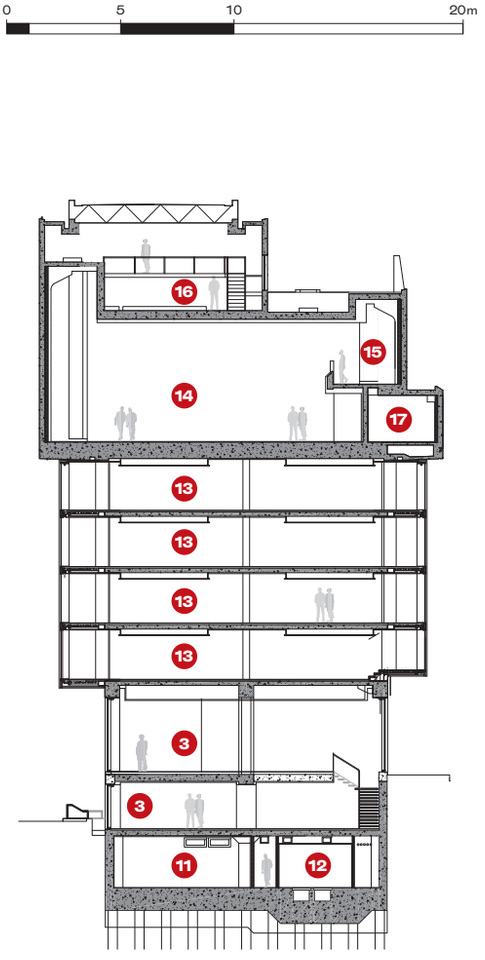
Key

1 New reception
2 Lift lobby
3 New office
4 Forecourt/ Route to London Wall
5 New slope down to Salters' Garden
6 Salters' Garden
7 Roman Wall
8 Loading bay
9 New archive
10 Boiler room
11 Wine store
12 Office showers
13 Extended tenant offices
14 Ceremonial hall
15 Gallery
16 Plant room
17 Cloak room

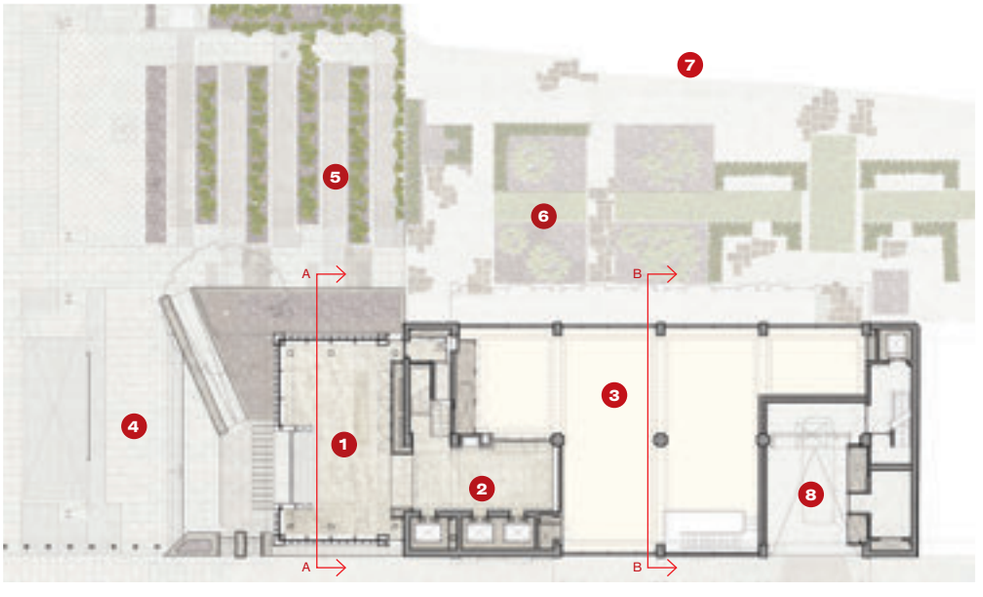


Section AA



Section BB

Ground floor plan site

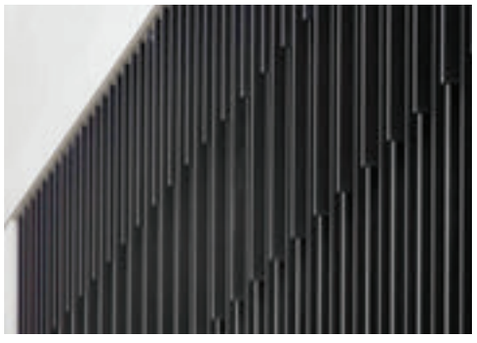


says the then City of London chief planner was keen on greater transparency between the Barbican complex and London Wall, he adds that the firm also wished somehow to pick up on the main building's solidity. 'Spence's design has a baronial character – it felt a bit like a Portcullis. We wanted to adopt a similar concrete language to give it weight, so went for a rudimentary table structure that had a classical proportion to it.'

This double-height structure touches the main building lightly on the east side with a glass slot that leaves Spence's concrete fluting untouched. It's this fluting that underwent metamorphosis as part of the formal treatment of the new extension, manifesting externally at high level in bronze painted PPC aluminium as a complex pattern of brises soleil, shading the glass and mitigating solar gain to the reception area. More shading is achieved internally at roof level with a grid of deep 1200mm beams that serve as a foil to whatever direct light makes it past the glass roof's heat reflecting copper mesh interlayer. This all attaches back to a 1700mm deep perimeter ring beam, adding structural stability. The resulting table top pavilion, fed by mid-level air supply vents set within an ash lined service riser against the east wall, is solid, yet light and elegant and has proved transformatory for the entrance sequence.

On the office levels above and behind, the architect's intervention has been more sleight of hand, drawing Spence's facade nearly 2m forward on the north and south and creating 260m^2 of extra tenant area from the first to fourth floors – maintaining a modicum of overhang at upper levels as per the original design. As Knight explains, this took the form of steel cantilever beams clamped and bolted onto the edges of the existing concrete floor slabs, with a perpendicular beam connecting them back to existing columns. There's some sophistry in the creation of faux columns to match the existing, which were 'constructed in Metsec overlaid with cementitious board and insulation with a thick-coat textured render system' to emulate the finish. The new low-e glass specified by dMFK matched the original single glazing's bronze tint while offering far better thermal performance.

Gains in tenant area weren't just gleaned from pulling out and filling in floor plates, but from a radical rethink of the services strategy. Both tenant and ceremonial spaces



had been served by large plant in the basement which was not fit for purpose. 'It was a combined variable air volume system,' explains Hoare Lea partner Chris Myers. 'This ran at constant temperature: only the volume of air would change according to the level of heating or cooling required.' A single system serving both ceremonial and office spaces, it was, says Knight, hugely inefficient, given the spaces' different conditioning requirements. It was also space hungry. 'The system needed lots of risers and when we upgraded we adopted a strategy that meant we could recover space for the office floors.'

Key here was the decision to connect to Citigen, the City of London's power generation and district heating and cooling system in Smithfield. This serves a number of Corporation properties, including the Barbican, via a network of insulated underground pipes. Myers was keen to take advantage of it, explaining: 'As an off-site low-carbon source of heating and cooling [both air and water], it offered opportunities to reduce the carbon footprint of the building. It completely changed the services strategy for the Salters' Hall.'

The consultant team decided to split the servicing requirement in two, recognising how tenant and landlord air handling demands were distinct. As a result, they went for a 'bottom up' approach for the offices and 'top down' for ceremonial spaces. 'Water is tempered in the plate heat exchanger room at basement level and pumped to four pipe fan coil units, mounted in the ceiling void, serving the office spaces', adds Myers. The connection to Citigen also freed up space at roof level previously occupied by central chiller plant but now housing new air handling units installed to provide conditioned air directly to the ceremonial rooms.

While the hall's original ducts couldn't be changed for fear of damaging David Hicks' delicate curved ash wall screens, the air handling strategy was reversed to provide displacement type ventilation better suited to large hall events. Crucially, the strategy to link into Citigen significantly reduced the building's carbon footprint and had a positive impact on its BREEAM rating, though Myers adds that space has still been allocated at basement and roof levels for plant in the event of the building needing to generate its own heat and cooling in the future.

With the roof remediated and converted to a warm one with 120mm of PIR external insulation, performance was raised to such a degree that it obviated the need to carry out any works to Spence's original concrete fabric, leaving its defensive white skin standing in counterpoint to dMFK's pavilion; part of its more transparent, ordered, energy efficient and profitable 21st century iteration.

Top left David Hicks' delicate ash-lined ceremonial hall integrates the gallery from the former ladies' dining room into the overall hall design.

Above left The bronze coloured PPC aluminium brises soleil of the reception area reference both Spence's fluted concrete and the delicacy of Hicks' interior design.

Above right Looking up, the grid of beams connecting to the 1.7m deep perimeter beam lets light pour in while mitigating solar gain in the reception. Light fittings are bespoke.

Credits
Contract value £12 million
Client The Worshipful Company Of Salters
Architect /designer De Metz Forbes Knight Architects
Contractor 8Build
Structural engineer Elliott Wood
M&E engineer Hoare Lea
Quantity surveyor Jackson Cole
Interiors Todd Hunter Earle
Letting agent, retail consultant etc Ingleby

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Roll up your sleeves

London's Vista project is cracking on apace thanks to Hilti's time and cost saving cast-in firestop, says Jan-Carlos Kucharek

Left The Hilti CFS-CID cast-in device.
Below Scott Brownrigg visualisation of the completed Vista development.

Gone are the days of one of the capital's most contentious post-modern buildings, Marco Polo House, whose monochromatic, oversized pediments stared out from its sea of a post-industrial landscape like a po-mo Paestum. The site is now is part of the multi-billion pound Nine Elms regeneration, at the centre of which will be the iconic and cubic American Embassy; a masterplan of such scale that it merited its own Northern Line extension. And replacing Marco Polo House, architect Scott Brownrigg's mid-rise Vista residential development is rising on the south side of Chelsea Bridge, taking full advantage of views west to Battersea Park.

The project, by client/contractor Berkeley Homes, is made up of 456 one, two and three-bed flats, duplexes and penthouses, rising from six to 16 storeys in height, stepping back as they rise to form terraces that minimise the bulk of the scheme and generate its distinct, curved form. Of course, with all that formal complexity, there's a similar increase in the complexity of the services strategy to feed it – something Scott Brownrigg thought would be best dealt with at the outset rather than accommodated further down the line. This drove it to consider a fully integrated strategy for the vertical pipe runs – one helped with the use of Hilti's latest CFS-CID cast-in firestop device, which allows the sleeve and collar to be cast into the concrete slab of the building as they're poured, obviating the need for any further works. And perhaps firmly putting the holes in the former 'Polo.'

It will come as no surprise that engineering manager at Hilti Olga Katsanova sees Scott Brownrigg's specification of the cast-in device as something of a no-brainer. It was, after all, first developed 10 years ago as a one-stop solution to help eliminate firestopping complexity and margins of error, and was tested for a wide variety of plastic pipe materials. 'The whole plastic sleeve detail with its integrated fire collar is cast into the slab as it's being poured so you can pass your pipe through it without any further sub-contractor remedial works,' explains Katsanova. 'It's easy to install, fit for purpose, meets EN-1366-3, and since it means

Above MPB Structures' senior project manager Michael Begley and senior engineer Nabil Soliman on the Vista site with Hilti staff.
Right From top: Attaching the cast-in device to the formwork; The device is small enough to cope with rebar set out grid; The square opening at top of slab level; Casting the slab and sleeve in place at Vista.

you have effectively eliminated two thirds of the labour associated with doing the job, it pays for itself very quickly.' Katsanova does concede that it makes demands on the user – you must have decided the exact position of the opening when you cast the slab – but she adds that this aspect is merely in line with design and construction best practice.

Although the Vista project is the first time he's used the cast-in device, Scott Brownrigg architect Stuart Mills agrees – having been asked to use them by Berkeley Homes, which had successfully employed them in a previous project. And in line with best practice, the architect tried to ensure that slab penetrations were fully fixed at tender stages on this construction management project. 'With nearly 500 apartments, we were keen to ensure these were prescribed at tender, meaning we'd only need to alter them on rare occasions that buyers bought adjacent flats, requiring major internal reconfiguration,' explains Mills.

He says that being new to the product, the firm conducted its own due diligence on the cast-in device early on to ensure that it was suited to the scheme, and adds that it was happy with Hilti's 'invaluable' support throughout the construction phase. Mills quickly grasped the cast-in detail's potential benefits. 'I liked its simplicity- there's not much that can go wrong with it as opposed to the workmanship issues you'll be faced with when creating service openings using traditional methods,' he adds. But that doesn't mean it allows for lack of co-ordination. 'Positioning is critical as the detail is obviously not a flexible one, but here at Vista there are some tight bathroom voids and it's helpful that the collar comes in different sizes as well as ratings.'

The latest cast-in detail's design modifications have increased its capacity to be tailored to different on-site scenarios here too – something MPB Structures' senior project manager Michael Begley welcomed. Having used the product for years, he appreciates the next generation version that's being employed at Vista, saying it's helped put the project nine weeks ahead of programme. 'The new device is squarer, more stable and made of denser plastic. That really helped when it came to fixing together the 150mm extension pieces in areas like the podium, where the slab can be 800mm thick in places,' he notes, adding that it's a case of just 'marking up, screwing in and job done – the screw on protector caps are also much better.' And the way the latest models can snap together with only a 52mm gap between adjacent 110mm pipes – as opposed to the former 105mm – allows the detail to be more space efficient. This also makes it easier for devices to fit in around rebar runs, its compactness requiring less bending of steel around their positioning.

Begley says it also brings more cost surety to a contractor when tendering, avoiding potential logistical and programmatic costs associated with building open service holes on a working site. It's an opinion echoed on the design side of the team, with Scott Brownrigg's Mills saying, depending on the level of desired flexibility of the project, that he 'wouldn't have any reservations specifying the cast-in detail on future projects'. If Begley's to be believed, maybe he needn't be such a crystal gazer. 'There's 3,500 slab penetrations on this development, he concludes. 'If we get them all right, imagine the savings you'll have made.' ●

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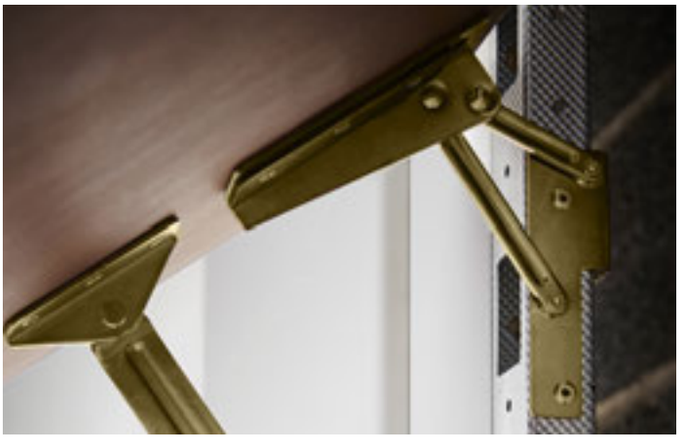

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2: Intelligence

Where people live

Alan Benson

Alan Benson is responsible for housing policy at the Greater London Authority, in charge of its Housing Policy Unit. We talked to him about the new mayor's plans for the capital, viability and his favourite bridge

The London Plan needs 50,000 new homes a year to meet housing need. How is Sadiq Khan going to achieve that?

Sadiq Khan did not actually commit to a 50,000 target in his manifesto – that was Zac Goldsmith. But he is committed to increasing housing supply and is especially keen to increase affordable housing delivery, towards his long term aim that 50% of all new homes should be affordable. This is alongside a commitment to being clear on the definition of what is genuinely 'affordable' housing in the capital.

But last year fewer than 4900 affordable homes were delivered

And worse than that only 13% of new homes started were affordable – which is why Sadiq says raising affordable housing delivery is a marathon, not a sprint.

Where does the mayor stand on starter homes?

Sadiq's gone on record saying they are not a product well suited to the capital. The £450,000 ceiling is not 'affordable' in a meaningful way for many Londoners and it may only work away from inner London, in areas where prices are more in line with national averages. What matters is meeting need across the income spectrum, not just helping those who can afford these prices.

What was this talk of addressing the issue of viability statements in the planning process to generate more affordable housing?

Nothing is settled yet but put simply we're thinking that we can't write new policy ahead of a new London Plan so we must be tougher on viability. If developers achieve 50% or more we'd ask for no viability information. At a threshold (say 35%) we'd be very light touch; if they can't meet that, we'd insist on open publication of all viability information, which would be scrutinised by an expert viability team at City Hall and every armchair auditor in London and beyond. We're looking to publish new supplementary planning guidance addressing such issues around October or November.

And what about the 'Homes for Londoners' team?

We already have a governing board to drive housing delivery, which will be chaired by Sadiq Khan and includes the deputy mayor for housing, TfL representatives , council leaders, housing associations and private sector representatives.

There's been a lot of bridge talk recently. Nine Elms, illuminated and garden bridges. Where would you want one and what's your favourite?

New bridges seem pretty contentious at the moment, so maybe just a modest pedestrian bridge right outside my office to the North Bank by the Tower to make my walk to work a wee bit quicker. My favourite? Hammersmith Bridge – it is the most beautiful and holds the most romantic memories for me.

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Where people live

Procurement & contracts

What did the EU do for Wales?

Brexit closes off a big source of regeneration funding

Josephine Smit

So Wales must bid hwyl fawr – that's goodbye – to the European Union. The UK electorate's vote to leave the EU means that the present round of EU structural funding for regeneration will be its last.

For more deprived areas of the UK, such as Wales and Cornwall, Brexit has raised serious concerns about future aid for physical regeneration, training, small businesses and more. The 2014-2020 funding round sees Wales receiving around £1.8 billion in structural funding, with the lion's share going to the 15 local authority areas that make up West Wales and the Valleys. This region, long ago devastated by the loss of mining and heavy industry, has received some of the highest levels of EU aid. It is classified by the European Commission as 'less developed', which means its per capita gross domestic product is less than 75% of the EU average.

All of this may have resonated little with Welsh voters living with the consequences of the region's decline, who were strongly for Brexit, but EU funding leaves its mark in the built environment. From the summit of Snowdon to Swansea Bay via the A465 Heads of the Valleys Road and Ebbw Vale, the products of its regeneration aid are visible.

In the initial years of structural funding, significant support was directed to smaller local initiatives such as restoration and conversion of local heritage assets and town centre improvements. But for the 2014-2020 programme the emphasis shifted to strategic infrastructure, or what the Welsh government calls backbone projects, like the proposed South Wales Metro integrated transport network.

'The learning indicated that the looser approach didn't maximise the benefit of the EU funding,' says Tim Peppin, director of regeneration and sustainable development at the Welsh Local Government Association. 'Even before the Brexit vote there was a feeling that funding was reducing and that community-based schemes weren't maximising gross value added. There's a greater emphasis now on using infrastructure to improve access to employment, on connecting areas of need and areas of opportunity.'

Peppin says it is not easy to gauge to what extent projects have succeeded in delivering the economic regeneration that was the EU's ultimate aim. He points out that major projects like Ebbw Vale take many years to develop and deliver transformation, and other

Above right Snowdon Summit Visitor Centre.

Left Bay Campus, Swansea University.

influences can have an impact, for example the closure of high street retailers. 'Town centres are in decline generally,' he says, 'so it is difficult to measure success in that context.'

Nonetheless there is much to celebrate in EU-supported projects, says Andy Sutton, associate director of BRE Wales and a past president of the Royal Society of Architects in Wales. 'The projects that have been funded leave a strong legacy in buildings and infrastructure. There has been the aspiration to produce good buildings.'

Sutton points out that as well as structural funds, EU innovation and research funds have helped produce a string of sustainable developments and research programmes. An example is the research on buildings as power stations being carried out by the industry-academia consortium at the SPECIFIC Innovation and Knowledge Centre in Port Talbot. 'The research funding has created hotspots of knowledge,' Sutton adds.

A key building project delivered through EU structural funding is Swansea University's Bay Campus and pro-vice-chancellor Professor Iwan Davies is fiercely proud of what has been achieved there. 'This is one of the top knowledge economy projects in Europe,' he says. 'It is one the best examples of delivering infrastructure to promote innovation, in the way we approached the co-location of academia and industry.'

The first phase of campus development was completed last year. A second phase, which includes AHR's Computational Foundry building, has its EU funding secured and is under construction. Davies says the first phase provided a lesson that may stand it in good stead in a Brexit future. 'It was conceived and matured during the very worst time. It started with 2008 as Lehman Brothers collapsed. We've seen construction under great strain and property prices challenged. But we've seen the campus pass a tipping point to where it can now grow in its own right. The fundamental learning for me from this is not to be overawed by the economic environment.'

Bay Campus, Swansea University

The Bay Campus is a high profile development by high profile architects on a prominent site, beside the waters of Swansea Bay. Its first phase includes the 700-seater Great Hall, student accommodation, a library and research facilities. The project was masterplanned by Porphyrios Associates, which collaborated with Hopkins Architects, and the Princes Foundation for Building Community. The latter is now masterplan custodian. The university wanted to develop more than a set of buildings on the site, which had been a fuel distribution hub. Professor Iwan Davies, university pro-vice-chancellor, says: 'We set out to create an environment that would be inspiring to students, where the public realm would be as important as the buildings, and that reflected the Anglo-American idea of the campus.'

National Waterfront Museum, Swansea

The National Waterfront Museum in Swansea's maritime quarter opened in 2005. It

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now attracts more than 250,000 visitors and generates more than £7 million in tourist income annually. The design by Wilkinson Eyre combined renovation of a 1902 grade II warehouse with new galleries clad in glazing and Welsh slate. National Museum Wales and the City and County of Swansea drove development with a cocktail of funding from backers including the EU, the Heritage Lottery Fund and individual donors.

Ebbw Vale – The Learning Zone

Long before Tata Steel hit the headlines, there was Ebbw Vale. The South Wales works was once the largest steel mill in Europe, but by the 1990s it was shrinking and adapting to globalising industrial markets, with part of the site temporarily hosting a national garden festival. Since then the steelworks site, rechristened The Works, has been a target for regeneration development, including a learning campus and leisure facilities, homes, offices and retail. One of its new buildings is the Learning Zone, designed by BDP, which also produced the masterplan for The Works. The Learning Zone caters for 16-18-year-olds, providing A-level courses and vocational training. The development incorporates natural ventilation, rainwater harvesting and solar photovoltaic panels.

Ebbw Vale – Regain Building

Regeneration and innovation have gone hand in hand to generate sustainable buildings and extend local expertise. The Regain Building, developed on the Ebbw Vale steelworks site in 2011 and funded with the help of the EU's Interreg programme, is a business incubator unit created using sustainable design approaches and materials. The design by Stride Treglown includes blocks from Newport company Durisol, locally sourced sweet chestnut timber cladding and a range of sustainable technologies. The client was Blaenau Gwent County Borough Council.

Snowdon Summit Visitor Centre

Snowdon's visitor centre, Hafod Eryri, is the highest building in the UK and has been providing refreshment and shelter to climbers

Below Ebbw Vale Learning Zone.

Below Ebbw Vale Regain Building.

Bottom Tremough Innovation Centre, Penryn, Cornwall.

Below Discovery Centre, Llanelli.

for seven years. Ray Hole Architects designed the building to withstand the extreme weather conditions of the summit, using local materials including granite and slate from Blaenau Ffestiniog and Welsh oak. The building was funded by the Welsh government, Snowdonia National Park, the Welsh Tourist Board, the EU, Snowdon Mountain Railway and public subscription.

Discovery Visitor Centre, Llanelli

This building overlooking Llanelli beach is packed with nautical references, including stainless steel mesh 'sails'. The centre opened in 2004 with a dual mission – as a focal point along a coastal tourist trail and a flagship building for remaining development in the Millennium Coastal Park. Powell Dobson's design, for Carmarthenshire County Borough Council, runs the coastal path through the visitor centre, via an interior spine wall. The centre has delivered on its mission and the coastal park now has wildlife habitats and leisure facilities, as well as visitors.

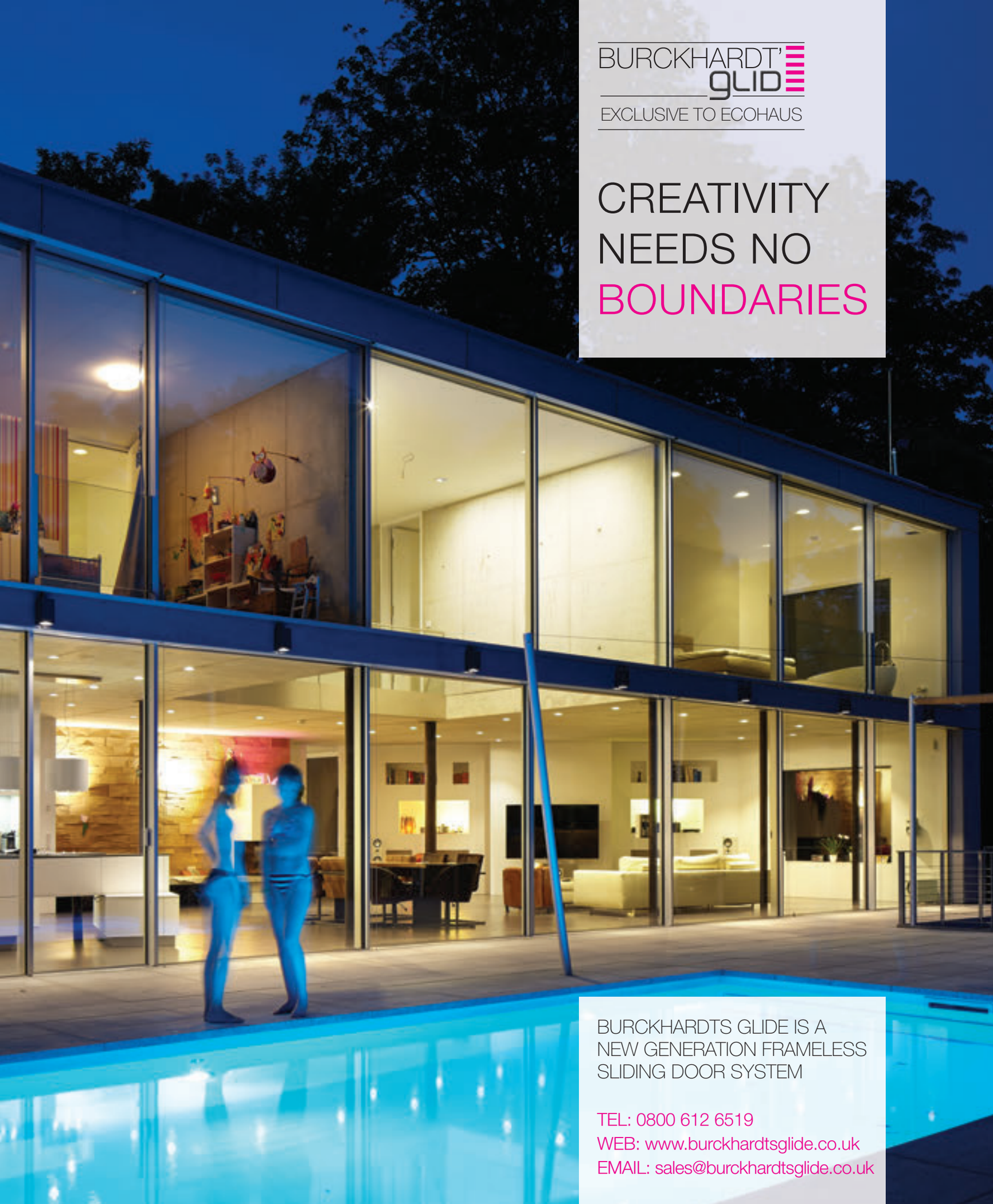
CORNWALL

Like West Wales and the Valleys, Cornwall and the Isles of Scilly is classified as a less developed region, and therefore has benefited from the highest levels of EU funding, receiving some £1 billion of aid over the past 15 years.

Grimshaw's Eden Project is probably the best known EU-backed development in the region, but a wealth of buildings, roads and other infrastructure has also received aid. Those projects have included regeneration centred on breathing new life into former mining landscapes, such as the Heartlands Heritage Centre in Redruth and Wheal Jane Earth Science Park in Truro.

There have been new buildings intended to boost innovation, like the AHR-designed Tremough Innovation Centre in Penryn, which provides incubator business space, and to foster community, like Jubilee Wharf in Penryn, a Zedfactory designed scheme that combines artists' studios, nursery, offices, a community hall, café and homes.

The region has more than £500 million of structural funding allocated in the 2014-2020 programme.



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Let's unbind our old school ties

Curriculum uniformity within architectural education is becoming unaffordable. But what are the alternatives?

Words: Harriet Harriss

RIBA COLLECTIONS

While many practices are swiftly recalibrating their ways of doing things in response to market uncertainty, architectural education seems far less agile. This is despite the recent abolition of maintenance grants in England and Wales, and – following the EU referendum result – a likely deficit of £3.7 billion in lost fees from departing EU students and £1 billion less EU research funding. School strategies seem rigid, while the cost of a degree continues to rise.

Two other factors further inhibit financial fecundity: the sector-wide expansion of university administration teams and the emergent spectre of CEO-sized senior management salaries. While these issues might seem beyond architectural educators to influence, inaction is not an option either.

We were poised to take action 18 months ago: as we sat huddled and heckling in the RIBA's Jarvis auditorium: voting to implement the Bologna Agreement. This EU parity proposal would have reduced the length and cost of architectural education and further increased cross-EU mobility for students, academics and young practitioners alike. But instead of a revolution, a nightmare has unfolded: a (in my view) fraudulently imposed and mutually non-consensual divorce from the EU that has derailed our collective optimism for much needed change – greater international exchange, and our ability to offer more affordable routes to professional qualification.

But why is affordability such an important issue? 'Affordability' is about more than just fees. It's an access metric that articulates both our professional ethics and our commitment to inclusivity. If we make education affordable to just a few, we fail to become a profession that is as richly diverse as the society we seek to serve. What schools of architecture need to do is to work out how to help students stick out their tongues to the funding crisis without the risk of getting it cut off. So what are the options?

The re-distributed classroom

The fledgling London School of Architecture (LSA) is one example. Instead of sweaty campus-situated studios, students are located in the 'real world' of a London-glitterati practice. Fees are £6,000 a year and each student receives an RIBA approved salary to boot. Although the school is in its exploratory phase of validation, it offers a both financially and

pedagogically competitive model. According to director Will Hunter, the students' Part II thesis project is intended to set a career trajectory and contribute towards the LSA's emergence as a think tank – pushing the ambition and value far beyond a mere qualification. Students are taught tools and methodologies, but take personal responsibility for developing the judgement needed to apply them. Perhaps one of the most appealing aspects of the LSA initiative is the absence of institutional overheads. Indeed, LSA's decoupling from the obligations and values of a traditional campus institution in search of the cultural interactions offered by Somerset House has affected learning behaviours, too. As Hunter explained, the terms 'student' and 'faculty' are no longer useful; the LSA spirit is much more collaborative.

Fees versus faculty

However, for those who can afford the extra £3,000+ price hike that an institution-situated practice-embedded programmes offers, then Satwinder Samra is launching an MArch in collaborative practice at Sheffield University: this is an innovative earn-as-your-learn validated Part II programme, where students spend 50% of the programme based in practice, and like the LSA benefit from a working income throughout their qualification period.

Regional pioneers

Interestingly however, both the LSA and Sheffield draw their pedagogic proof of concept from the RIBA's own practice-situated qualification initiative – the Parts I & II Office-Based Exam that's been discreetly administered by Ronnie MacLellan at Oxford Brookes School of Architecture since 2002 – but is in effect a continuation of the RIBA's original RIBA Examination in Architecture founded in 1863. Despite the institutional alignment, fees for this programme are a highly competitive £2,351 and the programme requires students to travel to Oxford only once a term, which may explain why around 25% of the students enrolled in this programme have young families and are often hail from remote towns and villages.

> The terms 'student' and 'faculty' are no longer useful, the LSA spirit is much more collaborative

The revolving door model

However, for more risk-averse under-graduates seeking to combine an immersive, institution-based undergraduate experience with a strong connection to practice, Reading University's new BSc architecture programme, led by Professor Lorraine Farrelly, aims to do both. In this scenario however, practices are invited into the academy, as opposed to being seen as practice-based classroom providers.

Left AA students get hands-on with building in the 1940s.

Right Students at the new practice-supported LSA: from left Rachel Bow, Stuart Goldsworthy-Trapp, Vanessa Jobb, Milly Salisbury, Timothy Ng, Frazer Haviz, and Maeve Dolan.

JAMES KENNY

UNIVERSITY OF READING

Knowledge is co-created, not just consumed, and discovering new ways of doing things are more important than imitating old ones

Left The new Reading School of Architecture has started life in this converted building...

... but in 2017 Hawkins\Brown will start refurbishing the listed Brutalist URS Building at Reading University **below** to be its new live-projects architecture school

Instead, the intention is to develop a two-way discussion, educating architects as well as students through the revolving door of shared lectures, workshops and events. This offers a refreshing departure from stale sandwich lunch CPDs, and a greater commitment to supporting professional life-long learning than any other school has so far ventured. To kick-start the programme, which launches in a few weeks, a £2,000 annual bursary scheme gives an added incentive to students from lower income backgrounds, too.

Pedagogic pioneers

But are these efforts enough? While the ethics of affordability have been a perennial problem in architecture, not all 'solutions' are future-situated. For example, the Architectural Association School was founded in 1847 by students Robert Kerr and Charles Gray (18 and 23 years old respectively) who were determined to rebel against an exploitative practice-based tutelage system whereby young hopefuls spent decades trying to qualify through a poorly paid internship route. Their tactic was to establish an auto-didactic, each-one-teach-one model of educative enterprise. While the AA School has since resorted to a more conventional management structure, the model flourishes elsewhere. For example, in the US based Hacker Houses cohabiting students take societal problems as their brief as part of a fee-free higher education alternative to a lifetime of learning debt. In anti-institutions such as these, knowledge is co-created, not just consumed, and discovering new ways of doing things are more important than imitating old ones.

De-institutionalised alternatives

Whereas Kerr and Gray pedagogically petitioned the 'large premiums' demanded by a practice-based learning environment that was seen as corrupt, today's pedagogic pioneers are turning their back on academe.

So if the question of affordability – writ universal access – cannot be resolved inside our institutions, practice-situated and de-institutionalised pedagogic models will inevitably flourish. If the overheads of institution-situated education are set to increase, perhaps it's time to re-board Cedric Price's PolyArk bus, and tour England as a means to connect students to sites of architectural impact. Because somewhere between the chisel-wielding tradition of aural apprenticeships and the premium-price academic institutions is a vast bandwidth of pedagogic possibility: one where all kinds of more inclusive, accessible, community-engaged, practice-embedded student-led and affordable models of professional education can be pioneered and prototyped, expanded and exported. One where adventurous risk taking, excitement and chance can play their hands. ●

Harriet Harriss is a senior tutor in the School of Architecture at the Royal College of Art.

The RIBA provides a number of bursaries and scholarships to support students experiencing financial hardship, such as: architecture.com/Part2bursaries

See Jane Duncan's column, page 90.

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RICCARDO TOSETTO

Left Losing Myself, Alzheimer's Respite Centre, Dublin: a most subtle and appropriate design, reinterpreted for Venice Biennale.

An evolving sum of the parts

Niall McLaughlin, winner of this year's Charles Jencks Award, draws confidently on all traditions to reshape and develop them into something new

Charles Jencks

Sometimes in architectural history a particular city sparks a shower of individual talents, a starburst of excellence. Good designers emerge to dominate a local scene, emboldened by a self-generating tradition of creative conflict. Rome in the 17th century during the Bernini-Borromini wars is one well-known example. Another is London in the 1970s, when high-tech architects sparred with post modernists, both sides denying the labels while productively stealing from each other. Competitive clashes produce veritable starbursts, just as colliding galaxies are responsible for the great explosions of new suns onto the cosmic firmament.

In literature, this theory of creative conflict became dominant with the influential theory of Harold Bloom's famous Anxiety of Influence, 1973. He argued that competitive creativity is carried on by every generation of artists as a tumultuous dialogue with the past; the anxiety of followers who have to respect their tradition yet swerve from it and show independence, love their parents and kill them at the same time.

> The new work simultaneously changes all previous work, or the relations between them

When I asked Niall McLaughlin how he related to the architects he liked – Mies, Louis Kahn and Rudolph Schwarz – he mentioned a different view, the one Bloom was trying to overthrow. His reference was TS Eliot's Tradition and the Individual Talent, 1919, the most cited view of tradition in literary modernism. Eliot argued that tradition requires the novel variation to be introduced, in order to keep the past alive and revalued. Furthermore, that the western tradition of literature constitutes a kind of 'ideal order', where the new work simultaneously changes all previous work, or the relations between them. This classical notion of the past alive in the present is expressed by Eliot in different ways: as the 'mind of Europe,' as if Homer and Virgil were alive today, and as a 'chemical reaction,' where the reactants are poetic expressions and emotions, but impersonal ones. The pressure of these reactions creates waves across time, hence the immortality of poets or those working in a very wide, continuous tradition.

Dublin architecture since the 1970s is a good example of the Eliotic tradition at work. There are the exemplary modern buildings that McLaughlin cites as his influences when he studied and worked there – for instance, the Trinity College Library of ABK. And then the influence of many superlative individuals such as Michael Scott (RIBA Gold Medallist), or O'Donnell & Tuomey (ditto), or Grafton Architects, or more recently Heneghan Peng. Many threads unite these

NIALL MCLAUGHLIN ARCHITECTS

Athletes' Village, London, shows strong enough belief in eclectic practice to break out of the usual taboos.

characters. They are all engaged in social and urban architecture, to be expected in a classical city like Dublin, and they straddle the stylistic divides that competition forces on a global city. This is particularly ironic today, with Brexit, and the competitive race to the bottom for Dublin, the low-tax haven of capital, about to be challenged by London.

In any event, these architects (and McLaughlin, who has moved to London) constitute a recognisable Dublin School, with both the continuity and change that gives each architect the confidence to extend tradition in the way Eliot describes. It's a strange idea – we don't speak Homer's language – but a few architects today can still design in dialogue with the Gothic, or Borromini, as if having a creative conversation with the dead. And McLaughlin has certainly spoken to these eras and designers, with one of his superlative works: the Ripon College Chapel.

McLaughlin is the kind of architect's architect who gives the profession a good name. Staying within the confines of a particular style and tradition – broadly put somewhere between classicism and modernism – he is nonetheless not worried about changing both by hybridising them, nor frightened of being called post modern. In the time honoured manner of Mozart, he takes well known themes and tropes – the classical repertoire of the five platonic solids and their cognate modes (ellipse, parabola, pointed arch and so on) – and plays new games with them. This free style classicism of vigour and light is the High Game as defined by Lutyens, but it is orchestrated much more lightly without becoming etiolated. His structural logic carried out with repetitive geometries creates a new kind of optical architecture. The Bishop Edward King Chapel has its primitive strength, delicacy and content – virtues not usually found together – and others reminiscent of James Stirling (another great influence on the Dublin School, as was Leon Krier).

This is not the place to analyse its great structural gymnastics, mixing Schwarz, Nervi and Gothic, nor to show how he turns the classical truss upside-down in a stunning move that, with all his amazing ellipses and ovals, Borromini never tried. I don't have the space to detail the Corbusian architectural promenade through the spaces, nor the subtle articulation up the facades that Alberti and the Renaissance palazzo advised. It's also minimalist Mies with the Op Art of Bridget Riley. So there – if that isn't enough influence-name-dropping it is enough to bear out McLaughlin's Eliotic Theory of tradition – always extend, always bend. Thinking of Bloom's counter theory, of creative conflict, I asked Niall who were his pet hates, which architects he really disliked, what general problems did he want to overcome? Long silence; no anxiety and competitive anguish here.

His Alzheimer's Respite Centre in Dublin is one of the most subtle and appropriate designs for a sensitive building task I know. It stems from long careful research on the condition, and was reinterpreted for this year's Venice Biennale in his installation 'Losing Myself'.

In the time honoured manner of Mozart, he takes well known themes and tropes – the classical repertoire of the five platonic solids and their cognate modes – and plays new games with them

NICK KANE

Primitive strength, delicacy and content: Bishop Edward King Chapel, Oxfordshire.

McLaughlin's planning and city design are equally based on particular and local research.

Materiality, geometry, light, metaphor, abstractions, ornament and elegance are the obvious qualities. Quotations and iconic expression are sometimes prominent – and unembarrassed, unlike much other apologetic work today. Direct and bold, McLaughlin will even use neo-grec horses as mass-produced panels for his Olympic Housing, and not be accused of pastiche. Obviously he has a strong enough belief in eclectic practice to overcome the usual taboos that straightjacket architects, and this may stem from the confidence of working within an elastic tradition. For self-assurance he does have, a quiet poise in solving the next move in the long game of architectural chess. Perhaps there are only a handful of other such architects today: Stirling was certainly one. In any case, if all periods of architecture are possibly alive today – or immortal as Eliot would have it – because of computation power, globalisation and a host of other forces, it seems to be an elasticised tradition. And one with reciprocal spring, or two-way force, is hard at work here – only awaiting some big commission for this young architect of 54 to show it to the world. ●

Niall McLaughlin's lecture on accepting the Charles Jencks Award is on 25 October at RIBA, 66 Portland Place, London W1. For tickets go to: architecture.com

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Designing & building It

Page of consents

Periscopes up for a submarine training centre in Barrow, a crisp new academy in Manchester, and an expansion of London City Airport that will rob passengers of the whiff of kerosene

The emphasis is on regeneration for most projects here, which is a good thing – isn't it? Not for author Iain Sinclair though, whose book Ghost Milk lovingly recalls the fridge mountain landscape of Stratford, east London, before it became the Olympic Park. But this can feel reactionary: cycles of destruction and construction characterise the history of any city. Perhaps we should be as circumspect about doing nothing as about gratuitous over-development. Take a town like Barrow, for instance, where a new BAE Systems' training facility will aid long-term employment prospects. In the end, however, we must always ask ourselves, 'Is this better?' For me, the unmediated experience of London City Airport was part of its charm. Simple and slightly dated, the smell of aircraft fuel hearkened to travel's glory days. Without that kerosene smack, its new terminal will remind us that for all that might be gained, there's always something lost…

SUBMARINE TRAINING FACILITY, BARROW, CUMBRIA

Client BAE Systems
Architect McBains Cooper
Area 9,000m²
Planning authority Barrow-in-Furness Borough Council
Planning ref B12/2016/0389

There'll be a reason why this new submarine training facility came in slightly under the radar. Part of the £300 million investment in Barrow shipyard in Cumbria, it is intended to enable the potential building, testing and commissioning of the Successor programme, approved by the government in July this year. The fleet of nuclear-powered submarines should replace the Vanguard class in 2028.

McBains Cooper's two-storey centralised training facility in the Buccleuch Docks area has craft workshops, cellular and open teaching areas, offices, canteen and reception, all accessed off a central rooflit 'street'. The new building is intended to help develop a local 'future pipeline of talent', adding another 2,000 apprentices to 6,000 staff already working out of Barrow, and ensuring the new submarine construction programme is furnished with the right technical skills.

ECCLESTON PLACE, LONDON

Client Grosvenor
Architect BuckleyGrayYeoman
Total area 7,430m²
Planning authority London Borough of Westminster
Planning ref 16/03582/FULL

The trend towards creating more stimulating and bespoke environments for entrepreneurial start-ups, trailblazed by the likes of AHMM's Tea Building and Selgas Cano's Second Home, is reinforced by BuckleyGrayYeoman's Eccleston Place in Victoria. This is a refurbishment of four buildings to provide co-working space and eateries clustered around a central courtyard.

The office refurb is expected to incorporate the character of the older buildings while at ground level new shopfronts will activate the streetscape. Linking Eccleston Place and Ebury Street will be a central landscaped courtyard which, the architect says, will increase permeability through the site and provide a flexible outdoor event space. Practice director Paul White says the development 'draws on the surrounding Belgravia street pattern to create life and activity in a currently underused group of buildings'. We can only hope he's right: the nearby Buckingham Palace Rd, a charmless artery connecting Victoria train station to Victoria coach station, has always felt like a relative walk of shame amid Belgravia's moneyed excess.

BUTTERFLY BUILDING, LONDON

Client Portsoken investment
Architect SPPARC
Total area 37,160m²
Planning authority City of London
Planning ref 16/00209/FULMAJ

Helping to dispel that 'edge condition' quality of the City of London's Minories area, which crosses the site of a Roman cemetery, is a new commercial development on Portsoken St, just north of Tower Gateway station, designed by slightly imperial-sounding architect SPPARC.

'The Butterfly' will sit on the site of Lloyds Chambers, designed by Fitzroy Robinson in 1983 – a nine-storey curate's egg of an office with polygonal glass-walled entrance atrium, as noted in Pevsner. But it's away with the old in SPPARC's curvy, 12-storey commercial and retail development, which will more than double the floor space while maintaining the general height of the original building. Designed with sustainability in mind, it will have external terraces at office levels and a roof garden.

The permission also covers enhancing the public realm at ground level by upgrading the pavements on Portsoken St and Goodman's Yard. This should work well for the 3250m² of retail space to be introduced at ground level and below, 'enlivening the building and surrounding neighbourhood'. The development is intended to begin when the current lease expires in 2018.

LONDON CITY AIRPORT EXPANSION

Client London City Airport
Architect Pascall+Watson
Total area 51,800m² (terminal only)
Planning authority DCLG on appeal
Planning ref 13/01228/FUL (CADP1) and 13/01373/OUT (CADP2)

Those who crave the good old days of air travel evoked by the slightly retro feel of London City Airport, look away now. Its successful appeal means the City Airport Development Programme (CADP) can push forward on a series of 'landmark' projects, including a large terminal extension, new passenger pier, baggage systems and aircraft parking stands. Pascall+Watson's masterplan includes a new 260-bedroom hotel, parking, car rental and taxi facilities. The scheme anticipates a rise in passenger numbers to 6.5 million by 2025 using an additional 32,000 flights per year. The project should supply 2,000 new jobs in Newham, and £1.5bn a year to the national economy.

COOPERATIVE ACADEMY EXTENSION, MANCHESTER

Client Cooperative Academy
Architect AHR
Total area 5,225m²
Planning authority Manchester City Council
Planning ref 112021/FO/2016/N1

Sharp, 1m deep reveals of dark brick characterise the long elevational treatment of AHR's £15 million extension to the Cooperative Academy in Manchester. The reveal profile, which stretches the full height of the two-storey structure, acts as a unifying element for a building that will increase the school's capacity from 900 to 1,500 pupils.

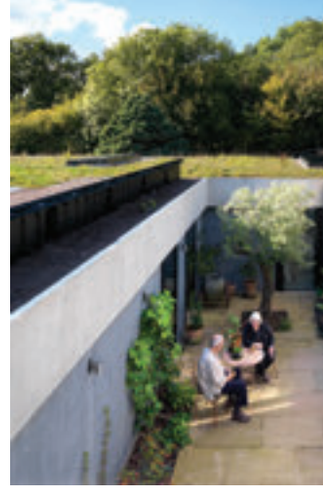
The design will create a new double-height student reception with additional 300-seat theatre, library, art studios, gym and climbing wall. A student café, embedded in the theatre wall, will double as a box office for the theatre. Teaching areas are isolated from this foyer space, with classrooms arranged around large, flexible learning zones.

CITY CENTRE HOTEL, LEEDS

Client Heeton Holdings
Architect SimpsonHaugh and Partners
Total area 9,700m²
Planning authority Leeds City Council
Planning ref 16/02252/FU

It looks like it's curtains – golden ones – for the old British Gas site to the north of Leeds city centre. Architect SimpsonHaugh has received permission to refurbish and convert a 1960s 12-storey office tower into a 182-bedroom hotel, the first stage of the proposed Bridge St mixed-use development on this 1ha site.

The most dramatic element, a new double-height lower-level podium containing the hotel foyer, café/restaurant and bar and other front of house facilities, seems inspired by stage curtains. Its facade is a rippling screen of deep-profiled gold glazed terracotta wrapping around the base of the tower and fronting on Bridge St. Highly visible from the ring road, 'it's a thematic device in which the foyer is gradually revealed to the passer-by,' explains SimpsonHaugh associate James Hind. If the foyer is the curtain, then the bedroom block could be considered the fly tower. But, clad in brushed aluminium panels, its overall visual effect is decidedly more back-stage.



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Into Africa

Working in emerging markets has risks and rewards. One of the latter is the chance to be involved in aspirational projects that are professionally and personally fulfilling says HOK

Femi Oresanya and Vance Thompson

Economic instability, geopolitical volatility, poor infrastructure and communication are among the challenges of doing business in Africa, and entry into these markets is not without risk. Many states have significant risk profiles that need to be weighed against opportunity. In Nigeria, the largest economy in West Africa, the government views infrastructure improvements as a key priority, yet the country also endures the spectre of Boko Haram extremism and corruption. Meanwhile in Kenya, the economy has remained resilient and investor confidence proved robust despite the security challenges that have played out on the world's media.

HOK has been working in the African market – and in particular, West Africa – for the last 10 years, delivering multidisciplinary services. The practice has designed projects ranging from Spur Loop, a five-star boutique hotel in Sierra Leone, to the Exchange Complex, a 98,000m^2 mixed-use complex in Accra, Ghana (pictured above) that includes residential, office, hotel and retail. It has also built schools, corporate campuses and resorts, learning many lessons along the way.

Working in the extreme climate just north of the equator presents real design challenges such as how to optimise building orientation, thermal mass strategies, shading techniques, glass coatings and other sustainability measures.

The importance of partnership

Identifying a local partner is essential to working in many parts of Africa. In Nigeria and Ghana, for example, there is a statute concerning use of local service providers, with governments committed to supporting the education, skills and training of local workers and businesses. The process of knowledge transfer is a key aspect of any relationship and the benefits must flow both ways.

As an international practice, HOK typically serves as lead designer, working from the earliest stages of a project through RIBA Stage 4 design, with local partners focusing on final delivery. Its involvement tends to reduce as a building hits construction phase, though the responsibility for delivery usually remains.

The partnering approach is highly collaborative. When beginning a project, HOK will typically invite the local partner's team to the UK to acquaint them with the practice's project delivery processes such as the latest software packages. Its African partners are highly skilled, and many have been educated, trained or employed in Europe or the US. Because many West African countries were formerly Commonwealth states, projects are often designed to UK building regulations. Many clients want buildings designed to international standards, whether those of the UK, US or France.

As the project progresses, HOK communicates regularly with these local partners to leverage their expertise. This enables the design team to benefit from their market intelligence and insights into local regulations and codes that might be applied at the beginning of a project, mitigating costly delays.

Pragmatism is essential. There is no Dun & Bradstreet available to weigh risk management decisions when new opportunities arise. Architects will also be expected to bargain hard on terms and fees, so a personal, informal approach is essential here. Be aware that restrictions on payments

Identifying a local partner is essential. Knowledge transfer is a key aspect of any relationship and the benefits must flow both ways

Left and below Atlantic Resort, Victoria Island, Lagos.

outside the country can make it a challenge to collect fees.

Cultural nuances within the client organisation, local design partners and suppliers can also contribute to the complexity of projects in Africa. For instance, clients or users may have other than expected priorities for their new building, or the local architects and suppliers may take an unexpected approach to a given task. Keeping an open mind is essential.

Infrastructure and supply challenges

Architects should be able to deal with the contingencies that any project might throw at them. In Nigeria, for example, there's no guarantee of a constant electricity supply, so you must factor in the possibility of costly power outage delays in planning the project budget and schedule.

Specification can also be a challenge, and the availability of virtually all materials, aside from concrete and steel rods, will be based on importation. There may also be limitations of import options for specified elements. Purchasing products and materials from abroad creates longer lead times, which affects the construction programme. While local suppliers have made sourcing easier in the African market, specification will continue to be a challenge.

Other considerations include the use of technology in buildings, which must be locally serviceable.

Opportunities for design excellence

Africa can offer tremendous opportunities for architects that can navigate through these challenges to design world-class projects.

Take Atlantic Resort, a mixed-use ocean-front development of 35,000m^2 in Victoria Island, Lagos. With a design inspired by colonial houses and the shells found on Lekki Beach, the development's complex sculptural form is intended to evoke nature.

The building's complexity conceals the requirement of factoring in local construction capabilities while meeting the brief and budget. Simple, modern construction processes were used, with precast concrete sections assembled on-site to deliver the project efficiently, preserving design intent.

Sustainable buildings are also a primary consideration for clients. In April this year, HOK announced a partnership with IFC, a World Bank Group member, to use IFC's EDGE (Excellence in Design for Greater Efficiencies) green building software and certification system. HOK has committed to using this software certification on five projects in emerging markets such as Africa over the agreement's first year.

One of these is the mixed-use Exchange Complex in Accra, Ghana, for which HOK provided concept design and where the two residential blocks received preliminary EDGE certification. Sustainable design measures including the use of low-E coated glass, while highly efficient HVAC and lighting systems will reduce energy use by 28% in the two residential blocks. Low-flow plumbing fixtures will reduce water use by 25%.

Some multinational corporations are investing in Grade A regional headquarters in African countries, including Ghana and Nigeria, with HOK's design of Oracle's new office in Victoria Island, Lagos being one example. The company's global employee value proposition required it to be delivered to the same high standards and specifications as every Oracle building worldwide.

While entry into these markets may not be for the faint-hearted, requiring a steep learning curve, it's encouraging to see what can be achieved by architectural firms through collaboration, innovation and persistence in this quickly evolving continent.

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Designers by numbers

How many architects are there in the UK? We unpick the different figures available to see how the profession is faring

Brian Green

According to the latest the Labour Force Survey (LFS) tally published by the Office for National Statistics in August Britain had 43,702 architects in the spring of 2016. This is down from a peak of 58,322 in 2013.

On the face of it that looks shocking. But is it?

As with nearly all statistical and survey-based information, the answers are seldom completely simple. So, for instance, the LFS is one of the best surveys around with a sample size of about 40,000, but you'd be a fool to take the numbers above too literally.

The sample picks up less than one in a thousand of the adult population, so one person either side of a representative number of architects when scaled up would make quite a big difference. People don't come in fractions, so even if the sample is truly random and truly representative, the data year-to-year is going to fluctuate considerably.

As you can see from the associated chart, the numbers (represented by the red line) are volatile. The 2011 figure, for instance, appears to be well out of the trend.

But while the exact number measured annually may be fairly questioned, the figure is going to be a reasonable stab and the trends will have some meaning. So is the downward trend real?

Before answering that, it's worth checking whether the actual levels are realistic. Does a range of 40,000 to 60,000 reasonably reflect the number of architects?

Methods of counting

There are of course other ways to gauge how many architects there are. We could, for instance, look at the census. Luckily most of the census data – that for Wales, Scotland and England is fine-grained enough level to provide a direct figure for architects.

In England and Wales the census for 2011 picks up 46,568 architects. Scotland found 4,463. In Northern Ireland there are 5,881 in the broader category which includes the likes of town planner and surveyors. Of this group other data suggest that architects represent about 20% to 25%, so could approximate to 1,300. That gives us a figure of 53,750, to the nearest 50.

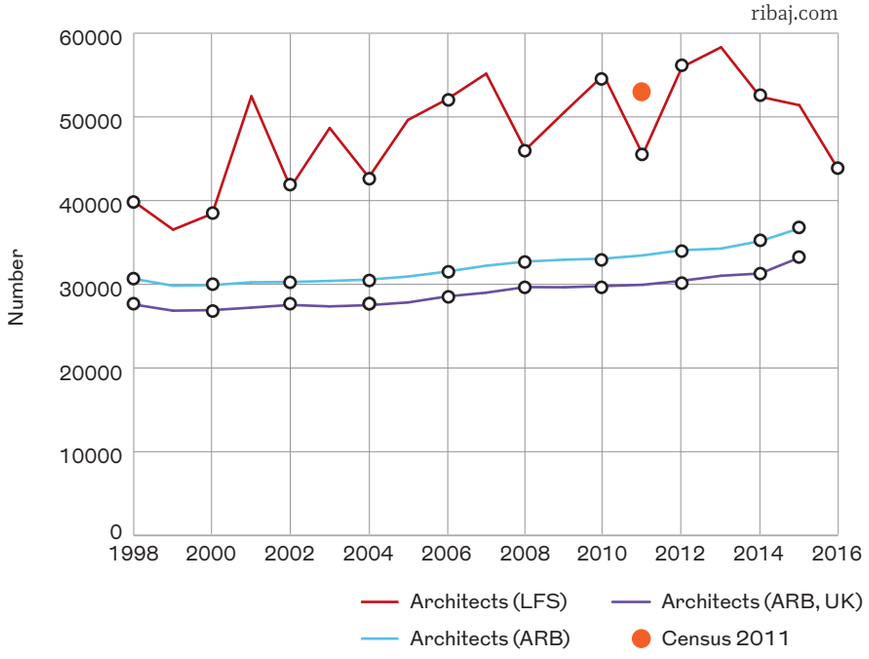
Plotting this figure on the chart (orange marker) shows how the census measured more architects than the LFS measure. It will be more accurate as it is a census rather than a scaled up sample. But the census figure is broadly in line with the LFS measure, suggesting the series is very much in the right ball park – if volatile.

The Architects Registration Board (ARB) counts its registrations of those who can trade as an architect. This provides a strong indication of trends in architect numbers. The headline ARB registration figure has been plotted on the chart (blue line). This number includes overseas architects, but the UK base (purple line) is pretty consistent at 90% give or take less than 1%. The latest figures show 36,678 registered architects in 2015, with 33,184 in the UK.

There is, after all, a relatively sizeable period between someone embarking on a career as an architect post-graduation and being able to register with ARB, in that registration requires qualification of, or equivalent to, Part 3. That would create a gap between people who might call themselves architects and those who are registered architects. This gap would be widened by those who might be trained and regard themselves as architects,

The important question is whether three years of fall in the LFS data is real when, at the same time, ARB figures suggest architect numbers are rising

Getting a measure of architect numbers



Sources: Office for National Statistics, ARB
Notes: Labour market data are taken from Table emp04. The ARB data are taken from the annual reports, the census data are from the separate Census 2011 data for England & Wales, Scotland and Northern Ireland

but who do not practice in business. The large ebb and flow of many hundreds of resignations, removals, reinstatements and readmissions out of and into the ARB register certainly seems to support that view.

So we appear to have a reasonable idea of the actual numbers of architects. The important question is whether three years of fall in the LFS data is real when, at the same time, ARB figures suggest numbers are rising.

Up or down?

A first thought is that, while the LFS survey may be volatile, three falls in a row is a strong hint that numbers are declining.

We can look to other data that might corroborate or challenge this view – the Creative Industries statistical series comes to mind. This picks up employment in architecture when measuring the creative industries, economy and occupations. This data definitely suggest a decline in employment within the broader occupations making up the architectural businesses in the UK. The problem is that much of the data ties back to the LFS for its source on occupations.

The Annual Business Survey, from which we can get data up to 2014 on employment, is independent of the LFS. Its employment measure is a bit unreliable, but it suggests growth in average employment for architectural businesses from 2008 to 2014 – though nothing spectacular. Interestingly, it shows a dip in 2011. The general growth fits the upward trend we see in architect number in both the LFS and the ARB data over years, but tells us nothing about a fall.

So, from hard data derived from representative random samples, it is tricky to know whether the recent fall in architects suggested by LFS is an anomaly or something more significant.

We can look to the monthly RIBA Future Trends survey for some guidance, as it asks about employment. It points to growth in employment among practices over recent years. This would seem to throw into question the LFS data.

However, perhaps paradoxically to some, recording more firms employing people or intending to employ people doesn't necessarily mean the numbers overall are growing. While a very useful indicator, this survey is not based on a random sample taken from a rigorously-managed sampling frame. We can expect it to have various effects at play, such as optimism bias or survivor bias.

It might be, for instance, that architects are shifting from micro or small practices to larger practices, as might happen in a recovery or through consolidation. If the small practices consequently close as a result of people leaving, they are lost to the survey, but the practice gaining the new staff would be included. So it is quite possible such a survey might suggest increasing numbers in employment (as is true of the surviving practices) when actually the overall number is falling, a fact missing because those firms disappearing are excluded.

Furthermore, it is measuring architects that are in practices, not the greater pool of potential talent available that might be being picked up by the LFS.

Left to speculate

From here we are sadly left to speculate on what might lie behind the rising ARB numbers and the falling LFS numbers and how they might relate to each other.

Tackling this conundrum points us to a potential lag in the data. We mentioned the time lag between those who might start describing themselves as architects and those rightly described as registered architects – a pipeline if you like. This thinking suggests that trends in ARB registered architects are following trends in architects counted by LFS. So a fall in LFS numbers is likely to come before a fall in ARB registrations.

On this basis the measured fall in architects in LFS, if real, may be saying something quite serious. Perhaps there is slack in the pipeline with fewer young architects coming through.

Clearly the dynamics are complex, with people moving in and out of the profession and choosing to retire at different times. The long-term effects of deep and prolonged recession on the pipeline of young architects is hard to gauge. Meanwhile, we have not explored the age profile; if that were to suggest an imminent wave of retirements it would compound any potential shortfall in young architects coming through the system.

It may prove to be a false alarm, but if the LFS data says one thing it is that it's well worth keeping a very close eye on how many architects there are in the UK at various stages of their career.

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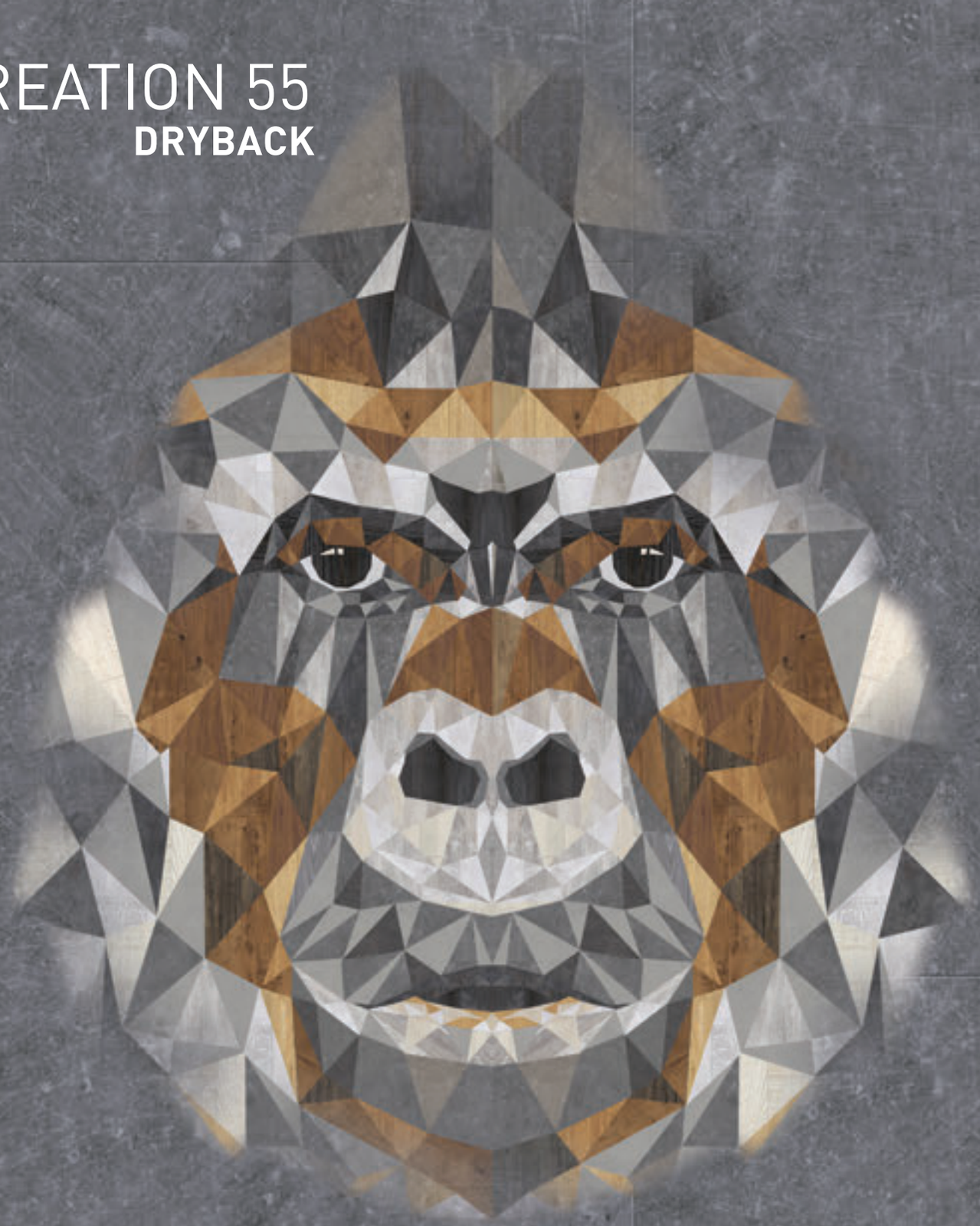

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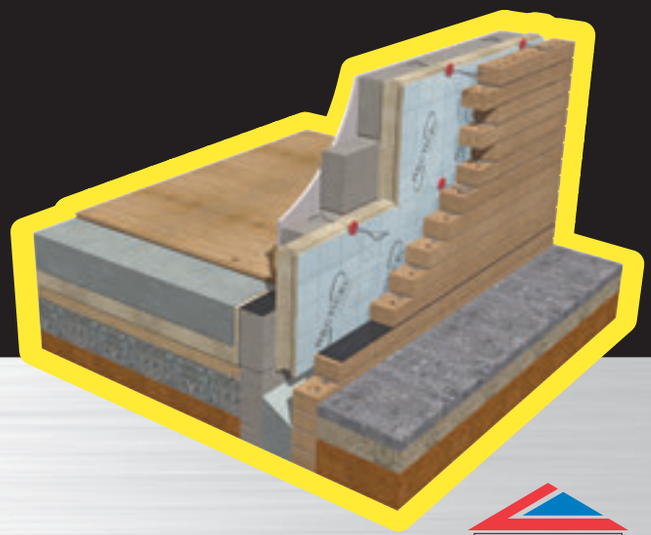

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Angus Dawson

You may have been asked by a client to produce a report into a redevelopment opportunity on, or potential purchase of, a property. You can take some reassurance from the fact that a client can usually only receive substantial damages for negligence in such a report if it can show that the purchase or redevelopment would not have gone ahead had the report been correctly carried out.

This issue formed a central part of a recent case involving a structural engineer's negligent report before a house purchase in Hastings in 2011. The buyer had commissioned a structural report on the property from a respected and eminent structural engineer of good reputation.

That report did not mention the tilting walls at the property, so that, having bought it on the basis of the report, the purchasers were dismayed that it needed to be demolished due to the excessive tilt of the walls.

Unusually, the defendant structural engineer took the view that the degree of tilt of the walls was not a big concern, by comparison to whether there was continued movement of the walls. His experience of the houses in the area, combined with his high standing in his field, did not outweigh the relevant guidance on wall tilt (and the related safety risk) specified by the BRE, by which test the property required demolition.

Another key factor in the case was whether the purchaser had been partly negligent by failing to inform the engineer of its plans to carry out works to the house, including a loft conversion. The engineer conceded that the plan to carry out the loft conversion was only formulated after the he had been instructed to produce his report. However, the claimant had taken preparatory steps (including preparation of the design for a loft conversion and other works) before exchanging contracts on the purchase. The planning application for the works was submitted the day after contracts were exchanged.

The defendant suggested the buyer was negligent in not checking the loft conversion plans with the structural engineer before purchase. However, this distracts from the main point in the case, which is whether the defendant engineer was negligent in not advising of the demolition risk at the time of carrying out his report. Furthermore, the judge decided that, although the buyer had taken preparatory steps to perform the loft conversion ahead of the exchange of contracts for the property, a firm plan to do so did not crystallise until after exchange of contracts.

The case is unfortunate on many levels. The judge had no doubt that the finding of negligence would be a blow to the engineer after a distinguished career of more than 50 years. The judge also speculated that the defendant and its experts had an unjustified suspicion surrounding the case, that the purchasers were highly interested in the plot but not the house, and had always intended to demolish the house and build a replacement.

These sorts of emotive reactions by parties often do prolong a dispute, and the judge noted that a case of this nature cries out for resolution by mediation.

The key point for professionals to remember from this judgment is that expertise gained from a distinguished and successful career is not necessarily enough to avoid questions of negligent advice where the professional's viewpoint differs from an accepted body of opinion. Where a major investment is made by a client on the basis of your advice, that will leave you open to a claim if the client can show reliance on your professional advice and that it would not have proceeded had that advice been correct. ●

Angus Dawson is with Macfarlanes

Expertise is not necessarily enough to avoid questions of negligent advice where the professional's viewpoint differs from an accepted body of opinion

IN PLAIN ENGLISH PARTIAL POSSESSION AND SECTIONAL COMPLETION

Clients sometimes use the expressions 'partial possession' and 'sectional completion' interchangeably, when in fact they are quite different. Sectional completion is a pre-meditated arrangement to split the works into various sections, each of which (under a typical JCT contract) will have its own completion date, its own part of the contract sum attributable to it, and its own rate of liquidated damages for delay. These are pre-agreed at the start of the project, and enable the work to be delivered to suit the client and its contractor in smaller phases rather than in one deadline for the job as a whole.

By contrast, partial possession is an ability (under a typical JCT contract) to finish off part of the works and hand it over to the client ahead of the completion date for the rest of the works. Alternatively, if the works are delayed but the contractor is able to complete a large part of the job, the contractor might agree with the client that part can be possessed by the client. Once partial possession occurs, that part of the works is deemed to have achieved practical completion for the purposes of the contract. The employer takes over responsibility for that part of the works, including matters such as insurance, and the contractor's liability for liquidated damages for delay is reduced pro rata.

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What's the truth behind the mission statement?

HOLLY EXLEY

Maria Smith

Awl Knyte Architects is an award winning practice working across a range of scales and sectors to deliver good design to clients. We at AKA are passionate about creating a high quality built environment. Our practice is uniquely placed to work collaboratively with clients to develop delightful spaces that are enjoyable and inspirational for all. Our client-oriented, design-led, research-backed, academically-inclined, non-hierarchical team is dedicated to working with enlightened, intelligent, ethical, curious, affluent clients to achieve innovative, cutting-edge, sustainable architecture. We at AKA believe that great architecture comes from striking an elegant balance between a project's context and the flavour of innovation our culture is comfortable with at any given moment. We seek to create timeless design by taking inspiration from the latest technology. We push the boundaries of aesthetic sensibilities by drawing on our wealth of experience of tried and tested methodologies. We create iconic background buildings that receive notable press attention through their humility. A robust, pragmatic commitment to technical execution characterises all our projects from start to finish and beyond.

Led by limelight-grabbing partners, supported by a tight-knit team of ineffectively ambitious associates, the vast majority of our abortive work is done by a young, dynamic, emerging, diverse, hardworking, chaotic team of haphazardly part-qualified architectural assistants. These up-and-coming architects-of-the-future are empowered to work industriously and autonomously in a variety of illegally downloaded software packages that ensure our proposals look efficient, co-ordinated, and in line with the prevailing zeitgeist. This powerhouse of production frees up our experienced architects to dedicate their time to writing fee proposals and bemoaning the existence of clients. We at AKA listen to our clients with rare cow-eyed attentiveness and prioritise making the client feel heard over relaying the clients' needs to the undirected casserole of subordinates.

This matchless commitment to translucent communication is also evident in our devotion to community and stakeholder engagement. Reflective of our belief in participation over consultation, we exclusively design accessible, lowest common denominator schemes that disenfranchise occupants and users alike. We have long contended that local people know more about their homes than we know about places we have never been to. We therefore seek to begin every project with an in-depth half-hour wander around the site and a couple of chats with people that don't look too different from us. We have extensive experience making pie charts and word clouds from statistically insignificant samples and of teasing out sound bites from unrepresentative focus groups. We have an unparalleled track record in evidencing voices in support of regeneration that convincingly contest arguments against gentrification, the exponential rise in inequality, and blindness towards cultural bias.

Environmental sustainability is at the heart of everything we do. We have a dedicated team in the office that ensures expertise on this subject is consistently unintegrated throughout our portfolio. This expert eco-squad can write about use of 100% recyclable materials and compare the carbon footprints of apples and oranges with an extraordinary efficiency that only comes with replication disguised as experience. This siloing of knowledge and reliance on post-rationalisation enables cutting-edge design to flourish unhampered by misdirected politics. We take a holistic approach to sustainability that challenges the perception of green washing with a dogmatic attitude towards the specification of infinite resources. Our partners are considered thought leaders in the argument for the perpetuation of the conflation of zero carbon and carbon neutral.

We have extensive experience making pie charts and word clouds from statistically insignificant samples

Unlike our competitors, AKA is committed to designs substantiated by the self-referential, incestuous provenance of architectural theory but at the same time legible to the everyman and buildable within the delusion that is our present economic and social context. To achieve this, we work tirelessly to iterate proposals in line with culturally arbitrary systems of justification, and exploit our colleagues in the construction industry at an early stage. We respect that our understanding of builders' lack of understanding places us at the pinnacle of cerebral achievement. We understand that architects are as much a part of the construction industry as man is part of nature. We understand that weathering is a smite that happens to the designs of bad people. We understand that gravity is an insurance scam. We at AKA have mighty powers to facetiously refute any law of nature or of civilisation. Our reactionary faux-self-loathing knows no bounds in service to the whims of our clients whom we hate with the vivacity of transference. We long for nothing more than to present ourselves at your mercy, to manipulate you into an emotional cartoon of Newton's third law that amounts to a self-flagellation, to author a bespoke simulation of Stockholm syndrome, to paint ourselves into your corner. ●

Maria Smith is a director of architecture and engineering practice Interrobang and curator of Guerrilla Tactics, 8 November, RIBA

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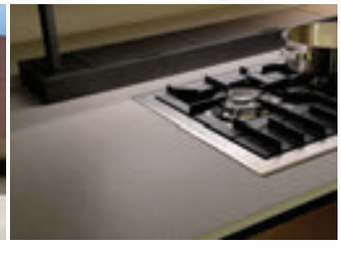

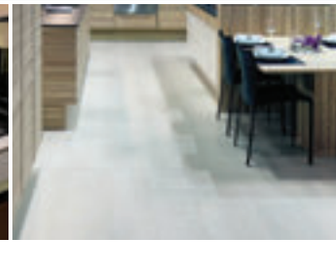

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Left A ring beam portal frame cantilevers over the entrance, its soffit clad in the characteristic KME Tecu Patina.
Below Verdigris sheeting was also used for internal columns and doors.

It's got to be green

With real copper unlikely to patinate, verdigris copper sheet forms the roof of The Grove hotel's new event space, with single overlaps for delicacy of detailing

It wasn't always as placid at The Grove as it is now. The former country estate of the Earls of Clarendon near Abbot's Langley in Hertfordshire, the 18th century mansion house was called in by Secretary of State John Prescott in 1997 in a landmark green belt test case, when new owners the Ralph Trustees were trying to convert it into a luxury hotel. They eventually won the two-year legal battle and architect Jeremy Blake, now at Purcell, was involved from the outset. He is handling the current programme of increased facilities and improvements at The Grove.

As part of the hotel's ongoing development the client decided in 2014 to create the Cedar Suite, an oval copper-clad structure that would act as a stand-alone wedding and events space for the hotel with its own unique quality and relationship to the garden. Influenced in part by the fact that interior designer Martin Hulbert's Bermondsey office overlooked a church copper roof, the design team decided early on to go for either copper or verdigris sheeting, becoming rapidly aware that with reduced sulphur dioxide levels in the air, real copper was unlikely to patinate. 'It was always going to be green so we looked at alternatives,' recalls Purcell's Kags Alexander-Cahill, 'But copper never left the table and finally we opted for verdigris copper sheet.' The chosen product is KME Tecu Patina supplied by SIG Zinc & Copper.

With engineer Michael Wright of AECOM, the firm developed the idea of a simple Borromini ellipse to form the oval plan of the new structure. 'It looks complicated but it's actually produced from only two arc radii,' explains Alexander-Cahill. 'This meant it was more straightforward to design, allowing us to produce easier to fabricate copper sheet templates and glazed sections.'

From this basic principle the team developed a slim steel structure with a ring beam portal frame cantilevering out over a wide garden entrance area, with 58 secondary 'fins' helping to create a 6m overhanging canopy, clad in SIG's copper sheeting. While the structure is thin, Alexander-Cahill states that, with 3m high full height glazing and doors beneath it, there was no room at all for deflection. That said, some compromises needed to be made as part of the design & build process. While the architect's intent was to have the soffit meet the eaves at a point, advice from contractors Galliford Try and AECOM produced an equally elegant but simpler solution with a small, flat face returning back to the zinc substrate to the extensive green roof.

The copper contractor CEL Ltd collaborated on the design and was keen on having double folded overlaps at sheet interfaces to ensure there would be no billowing of the sheets in the event of high winds, but with the architects wanting to emphasise the delicacy of the detailing, they settled on single overlaps, which creates more discreet joints with copper drainpipes behind structural columns.

There was a real desire to 'bring the outside in' from the project's inception, explains interior designer Martin Hulbert. This resulted in all internal columns and door carcasses in the space being covered in the same verdigris sheeting. While the single lap detail was used on the columns, for doors and wall detailing, sheets are glued and riveted to the substrate. Hulbert notes that copper's inherent pliable quality meant it ran easily around edges and returns. The common material palette has pleased a demanding client, he says: 'Even though the actual oval shape of the new space defined itself as distinct from the main building, we think we created a seamless relationship of interior to exterior.'

Joined up thinking

Stephen Chapman, technical consultant of rolled architectural zinc specialist elZinc, explains how to achieve best practice standing seam roofing

What is standing seam roofing?

Traditional standing seams date back to medieval times when they were originally used on ecclesiastical buildings. Nowadays, standing seam roofs still use malleable metals which are profiled into standing seam trays and then welted in situ either manually or with profiling machines.

Standing seam roofing can be used for any building type and any project where budget constraints aren't too severe. Its main advantages are aesthetic appeal, versatility of use on different roof forms, durability and the use of weathering materials that don't require a painted barrier. Zinc is the most popular material for this roofing, followed by copper, aluminium and stainless steel.

The standing seam joint

A typical joint requires 70mm of material to make and is formed by seaming together profiled trays of zinc running longitudinally from ridge to eaves. A small gap at the base forms automatically and allows for lateral thermal expansion. Joints are formed with a double lock that first links the trays horizontally and then folds the seam down to a vertical position. Seam centre dimensions normally range from 430-600mm. Each tray is anchored by a combination of fixed clips and sliding clips that allows longitudinal expansion.

Choosing the right cross joint

Cross joints are needed to introduce expansion joints on large roofs or around details such as chimneys, windows and other roof protuberances. There are several different common joint types (see box right) which vary in terms of complexity. The main factor in determining which detail should be specified is the degree of roof pitch, with different joints nominally considered suitable for different pitches. Another important factor of course is whether the joint needs to function as an expansion joint as not all of them can.

Other site-specific issues are roof orientation and weather conditions in particularly exposed locations – it's always a good idea to look at the installation site with an experienced installer and take all these factors into account when determining joint type. Useful guidance on UK installations is also available from the Federation of Traditional Metal Roofing Contractors.

Fixing

A combination of fixed and sliding clips is used to anchor the roofing trays to the substrate while allowing the zinc to expand and contract. This thermal movement is accommodated by a gap in the detail at the foot and at the head of the trays.

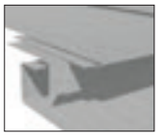
The position of the fixed clip zone depends on the degree of roof pitch. At low pitches such as 3° roofing trays can be anchored in the middle but as the pitch increases they need to be anchored progressively further up. By 30°, for example, they should be hung from a band of fixed clips positioned at the top in order to prevent the trays from buckling when they expand up the roof.

Dealing with wind loading

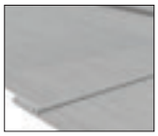
Properly installed standing seam roofing is suitable for the windiest of sites. As wind loads are transferred from the metal sheeting to the substrate and the structure of the building via the clips within the seams, the heavier the loading the more clips per square metre are needed. In addition, the bay width of the trays needs to be narrowed in windy locations, otherwise an unwelcome fluttering noise can be generated by the movement of the pans of the trays or, at worst, the standing seams can be lifted.

Higher wind loads therefore entail either

CROSS WELT JOINT TYPES



A: Step. Pitch: 3° and above up to about 10°. Height: 60mm. Often used as expansion joint on long, low pitched roofs. The detail introduces a small step in the roof and involves a corresponding step in the wooden substrate, normally using a fillet. The joint incorporates a continuous fixing strip and a T plate with a folded back edge between the two roofing trays that are being joined, as well as creating a 10mm expansion/contraction gap.

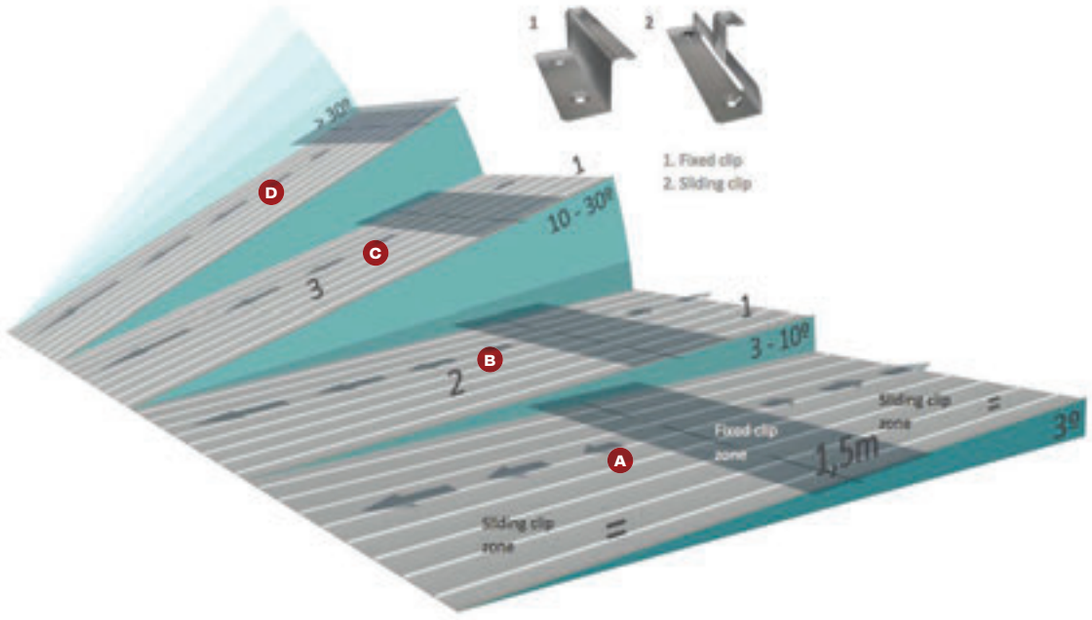


B Double lock cross welt. Pitch: 7° and above. Width: approx 20mm. Doesn't function as an expansion joint. This preformed 'slide-in' version allows for complete rainwater drainage. Cross welt joints should be staggered either side of the standing seam by at least 50mm to avoid too much metal being welted into seam at the same point.

C Lap lock. Pitch: 10° and above. Lap: approx 180mm. Often used as expansion joint for cross welts on longer roofs, it incorporates a soldered continuous cleat between upper and lower roofing trays. Less visually intrusive than the step so above 10° is the preferred method for controlling thermal expansion and contraction.

D Single lock cross welt. Pitch: 25° and above. Width: 40mm fold on lower tray, 30mm on upper. Can be used as expansion joint for steeper pitched, long roofs.

Standing seam zinc roofing, clip fixing distribution according to roof pitch.



more clips per linear metre, or a reduction in the distance between the standing seams or both. As wind loads are generally heaviest along the edges of the roof and at the corners, these are the areas where more clips are most likely to be needed. In particularly windy sites, it may also be advisable to increase the thickness of the metal itself from a typical 0.65-0.7mm to 0.8mm for zinc.

Avoiding pitfalls

Always consider the implications of the pitch and environmental conditions when specifying the roof details and the thickness of the metal. Architects also need to ensure the roof can drain properly so that problems aren't encountered during installation.
A not infrequent issue is low-pitched valley gutters that can cause particular difficulties if no proper provision has been made to recess them into the roof substrate. The correct ventilation of a 'cold' roof, or the proper choice, location and installation of vapour barriers in a 'warm' roof, are also of paramount importance. From a visual point of view, drawings need to set out the position of seams, especially on facades, to make sure these achieve the desired aesthetic effect. ●

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Find the real culprit

So-called leaks in flat roofs could well be interstitial condensation. No wonder applying another layer of membrane doesn't work, says SIG Roofing's Ian Dryden

Having worked on refurbishments for many years, I've become increasingly aware that the incidence of interstitial condensation in flat roofs has often been perceived as roof leaks. Generally, we're seeing many instances in warm roof construction of 1960s schools which were overlaid with new roofing in the 1980s – where dampness transpiring between old and new roofs can mean that the whole roof build-up may need to be stripped off.

Interstitial condensation can also be found in cold roofs – ones with no vapour control layer above the suspended ceiling. This scenario is generally caused due to insufficient ventilation to the void and can result in the insulation becoming saturated with moisture that has passed up through the lower layers. With cold roofs, the best way to solve this is to introduce or increase ventilation in the void. However, this can create conflict, especially when you are trying to achieve a thermal performance of 0.18 U-value, so ventilation may not be feasible. If so, removing the insulation above the ceiling and converting to warm roof construction maybe the only course of action.

Interstitial condensation has also become apparent in newer warm roof designs where a contractor has installed a ceiling with insulation above and an unvented void exists between the underside of the warm roof and the ceiling. Moisture can build up in the void and appear as staining on the ceiling. This is often misdiagnosed as a roof leak.

One Glasgow project is a prime example of this specific condensation problem. It was constructed in the 1980s over an unsealed metal deck and 'leaks' were noticed 16 years ago. To try to solve this, the contractor overlaid a new waterproofing system on the existing. When the 'leak' persisted, they didn't investigate further but just kept reapplying new roofing membranes around the area of the leaks. Incredibly, there were up to 13 layers of repair membrane in places.

Where water ingress or ceiling staining occurs, the first thing is to ascertain is whether the roof is actually leaking or if it's suffering from interstitial condensation. With flat roofs, water can track through the layers of roof's build-up, so it can be very difficult to identify the cause without cutting a hole in the roof. It's imperative to check if there's a vapour control layer in the roof build-up; if not, it's almost certain that interstitial condensation is occurring – especially if it's a warm roof.

Interstitial condensation is especially likely to be the cause if the building is used as a manufacturing plant, school or swimming pool, as there's a high internal moisture load that may be passing up into the ceiling void and roofing system.

Bottom A school roof refurbishment in Glasgow: over 90% of the roof was damaged.
Below Condensation between layers causing delamination.

If you're adding extra insulation to upgrade a roof's thermal performance as well as reroofing it, you have to ensure you are not creating a dew point within the build-up where moisture will condense. An interstitial condensation risk analysis should always be carried out before finalising any overlay design.

While every situation is unique, a general rule of thumb is that if the insulation to be installed on the top of the existing build-up has a better thermal performance than the existing one, interstitial condensation is less likely.

Technological developments have helped improve diagnosis. Drones can conduct visual roof surveys safely and thermal camera imagery can prove useful in helping to identify where leaks are tracking from. But ultimately a thermal camera won't tell you if you have a vapour control layer installed or the actual build-up of the roof. Core samples need to be taken to determine the actual roof build up.

Is the issue endemic in the UK's flat roofs? Maybe not, but at the moment interstitial condensation is the culprit in six of every hundred projects that I've surveyed. So, if you extrapolate that figure to the whole of the UK, how many roofs could that be? If architects are working on projects where this problem might occur, SIG has a free roof surveying service. This will not only help to diagnose the issues but will recommend a cost-effective solution using one of a range of certified waterproofing systems installed by our network of accredited installers and backed up with robust warranties. Interstitial condensation might be a problem – but it is solvable! ●

Ian Dryden is SIG Roofing's business development manager, specification.

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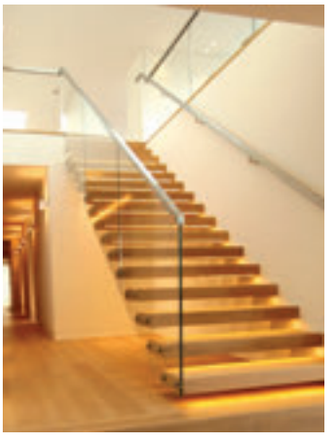

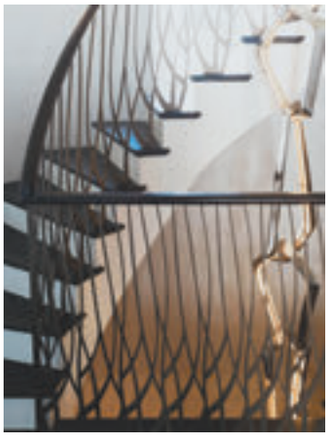
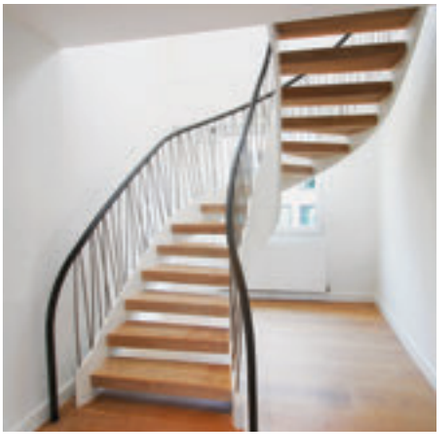

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3: Culture

High spirits

Highgate cemetery witnesses a resurrection (or two)

Hugh Pearman Editor

It was when the all-too-solid ghost of Adolf Loos, preposterously moustachio'd, appeared among the tombstones of Highgate Cemetery just after dusk and regaled us with some of his challenging architectural theories in an increasingly ranty manner, that I thought: architectural discourse is getting interesting again. So thanks to the revitalised Architecture Foundation and – in this case – its excellently-named 'Good Grief' series of mid-September debates on topics of loss and memory.

There we were, in the courtyard of the spookier western part of the cemetery with its restored chapel/gatehouse. In the centre of the space stood a structure, in timber and mesh, glowing a fiery reddish-orange. Inside it was a plinth and on that, an urn. Nicely scaled and sited as a focal point to the embracing colonnade behind, this was a funerary monument, but a transitory one. It was 'A Very Small Part of Architecture', an installation by Sam Jacob Studio commissioned by the AF for the three evenings of debates.

It is based on Loos' 1921 design for a mausoleum for art historian Max Dvorák – one of those very influential unbuilt designs that was intended to be in dark, solid masonry. Jacob made a ghost of it, at 1:1 scale. It is, he says, 'a different kind of memorial. Not one dedicated to a person, an event or a moment in time, not designed to remember the past but instead to imagine other possibilities, altered presents and alternative futures.' Its name was part of a quote from Loos's 1910 essay 'Architecture' in which he wrote: 'Only a very small part of architecture belongs to the realm of art: the tomb and the monument'.

HOLLY EXLEY

Only a very small part of architecture belongs to the realm of art: the tomb and the monument

The audience gathered round, sitting on chairs set out to the radius of the colonnade, focused on the unearthly tomb. The evenings were timed so that you arrived just as the daylight was fading: thus the glow of the fiery mausoleum increased as the surroundings fell into darkness. The fact that a modernist masterpiece – the listed Cor-Ten house of the late John Winter – overlooked the scene, its own huge windows ectoplasmically glowing, added to the atmosphere.

You might think proceedings would be a bit subdued given the location and subject matter but in fact it was quite a lark, devised as a form of popular entertainment (hence the ham actor playing Loos) sandwiching the serious discussion. The apocalyptic visual set-up and challenging acoustics were bound to overwhelm the discussion, but really that was only an excuse to gather people to see the set-up. That's what made me go on a chilly Friday evening, I admit. In fact the idea of resurrecting the Loos mausoleum was an existing Jacob project; the AF found it a home in Highgate and programmed events to go with it.

All this requires a huge amount of work, way beyond what's normally needed to get an architectural discussion going. The energy of all involved was incredible, as was the sponsorship of Zaha Hadid Architects, RCKA, Carmody Groarke and engineer AKT II, plus the practical help of architectural collective Assemble. As the gin circulated and the miasmas of night rose wraith-like in the autumn air, fiddlers in the mausoleum (including our own columnist Maria Smith) broke into folk tunes. Oh death, where is thy sting? Has architectural debate risen from the grave?

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Daddy dearest

Oliver Wainwright considers the merits – or not – of filial adulation

Oliver Wainwright

Being trapped on a floating pontoon in the middle of the lagoon with Alan Yentob would have been tough enough on its own. But that night at the 2012 Venice Architecture Biennale was made even more painful by the feature-length documentary about Ole Scheeren, the ex-OMA wunderkind, who had ferried boatloads of unwitting critics to his private floating cinema with no means of escape.

It was probably the only way he could have got anyone to sit through Against All Rules, an interminable series of montages of the trenchcoated Scheeren, blue-steel-staring into the middle distance, as CGI visions of his improbable Asian mega-projects flashed away in the background.

After this monumental flop, it might come as a surprise to learn that Scheeren's former mentor, Rem Koolhaas, has now followed suit with his own biopic.

Produced, directed, filmed and edited by his LA-based film-maker son Tomas, who has been filming his jet-setting dad around the globe for the last few years, REM provides an unprecedented behind-the-scenes window on to the working methods and personal ruminations of the most feted architect in the world. Or at least it could have done.

Instead, the result feels like a cross between a psychiatry session and an ad for a travel agent. In non-stop jump-cuts between taxis, planes and hotels, we see Koolhaas striding across the dunes of Qatar, surveying Beijing's smoggy skyline from a rooftop helipad, wandering through Dutch cow fields and floating in the sea off an exotic rocky coastline, as his voiceover intones pearls of wisdom to the sound of classical strings.

'Time,' says Koolhaas, the camera panning around his wiry frame as he contemplates the horizon, 'is like a barcode. Some moments seem almost implausibly extended and luxurious, as if time is standing still; then other periods are almost unbearably accelerated.' As the film ploughs through its 10 chapters, acceleration of time is the one thing you find yourself wishing for.

As the film ploughs through its 10 chapters, acceleration of time is the one thing you find yourself wishing for

At one point, Koolhaas muses on the idea of celebrity, complaining that doing interviews is 'almost a self-defeating effort,' and asserting that 'the dilemma of celebrity is whether you can use it or not,' as he battles through crowds of adoring fans. This indulgent filial eulogy, bereft of irony or critical distance – the very things that have most defined Koolhaas's career – might not have been the wisest use of his fame.

Tomas isn't the first architect's spawn to document the majestic career of its parent on film. Nathaniel Kahn, son of Louis, started the trend in 2003 with My Architect, a relatively accomplished effort, if not free from the mawkish American sentimentality that comes with a momentous 'quest for truth'.

Struggling for novel ways to present architecture on film, at one point Kahn straps on his roller-skates and glides around the plaza of the Salk Institute, inscribing balletic arcs across the sun-scorched stone. Did this inspire the young Koolhaas to arrange a 'parkour' sequence inside the Casa da Muscia in Porto, bounding up the front steps before jumping over a few handrails and flipping off the walls of the corridors – rather than, for instance, showing how the spaces of the building are actually used by concert-goers?

One such parental tribute that has yet to see the light of day promises to be the most compelling. Jim Venturi began filming his parents, Bob and Denise, in 2004, and had amassed over 400 hours of footage five years later, since when little has been heard. Perhaps the sheer scale of the task defeated him. Or maybe he's just biding his time for the right moment to release it – such as their long-overdue RIBA Royal Gold Medal, which can't come soon enough. ●

Oliver Wainwright is The Guardian architecture critic. Read him here every other month and online

CANDID CAMERAS

For some of the best examples of architecture on film, take a look at the work of Ila Bêka and Louise Lemoine, who started out filming the daily trials and tribulations of the cleaner in Koolhaas's highly mechanised (and highly impractical) Maison à Bordeaux, where Lemoine herself grew up. Their charming films reveal the lives of buildings in all their poetic and often dysfunctional glory.

HOLLY EXLEY

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O2 be in London

Kerakoll products deliver the right finish for London's Intercontinental Hotel in Greenwich

The riverside O2 InterContinental hotel in London stands on the buzzing Greenwich Peninsula, with 453 luxury rooms, a 17m swimming pool, a beauty spa, 20 meeting rooms and 3,000-capacity ballroom.

When main contractor Balfour Beatty appointed Chiltern Contracts Ltd as the tiling contractor, it quickly involved Kerakoll in site meetings and consultations with both contractor and the architect, G1 Architecture & Interior Design, for the choice of the tiling systems.

Karl Beeden, the Kerakoll representative, selected the products knowing that time constraints meant over 16,000 m² of tiling had be carried out without a hitch. H40 Eco Tenaflex was chosen to tile most areas, as it is extremely high grab, is easily adjustable and has a pot life of four hours. Fugabella Eco Porcelana 0–5 was used to grout the tiles and its Eco Silicone to seal joints. The Fugabella collection of grouts has natural antibacterial protection from NHL and very high levels of mechanical resistance, colour consistency and water repellence.

The first area to be considered was the swimming pool, where glass mosaics and porcelain tiles were specified. Tenaflex and the Fugabella grout and silicone came into their own here: the adhesive is totally stable even when in constant contact with water and the Fugabella range withstands sustained attack from chemicals.

The architect and designer chose 610mm by 610mm by 15mm River White granite tiles inlaid with brass to create an astrological pattern across the floor of the reception lobby, common areas and communal washrooms.

Before tiling, the floor was prepared using one of two self-levelling compounds: Keratech Eco R10 is ready for tiling approximately 12 hours after laying, while Keratech Eco R30 is used in areas where the original substrate is more uneven as it can be laid in thicknesses from 3–30mm, but dries equally rapidly.

H40 Eco Marmorex was specified as the adhesive for the granite. It is a pure white rapid set adhesive which locks in excess mixing water and prevents stains from forming on the surface of delicate natural stones. Washroom walls were tiled with Jura Beige limestone fixed with H40 Eco Tenaflex.

Caption Exterior of the Intercontinental Hotel London – The O2

Caption The Carrara marble bar and Blue Pearl Granite floor in the Clipper Bar

Caption River White granite tiles in the reception area of the hotel.

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Architect G1 Architecture & Interior Design
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River White granite tiles inlaid with brass create an astrological pattern across the floor of the reception lobby, common areas and communal washrooms

Granite was again chosen for the Eighteen Sky Bar, which is on the 18th floor and overlooks Canary Wharf and the London skyline. This time the tiles were black Star Galaxy in the same size as those in the lobby. Here H40 Eco Rapid adhesive was chosen as it is ready to grout in just three hours.

The Clipper Bar has a 270˚ view across the Thames to London from floor to ceiling windows and an oval bar top in polished Carrara marble. The curved front of the bar was tiled with hexagonal Carrara marble mosaics which were fixed with H40 Eco Tenaflex selected for its high grab properties and adjustability.

For the floor, the designer specified Norwegian Blue Pearl Granite cut into equilateral triangles and laid to form hexagons with smaller Carrara hexagonal inserts at the corners of each tile: the whole forming a grid of interlocking hexagons. The surface was first levelled using Keratech® Eco R10 to ensure it was perfectly flat. Then H40 Eco Rapid was used for the floor tiles due to time constraints.

The project proceeded to plan and finished on time with both client and architect very satisfied with the end result. ●

Educating the next generation

Why we need more flexible ways to teach architecture

HOLLY EXLEY

Jane Duncan

'The whole purpose of education is to turn mirrors into windows' – Sydney J Harris

Architectural education isn't just a means to a qualification. Intellectually and socially it's the most intensely stimulating period in your life, when you have time to research and explore ideas and to discover your own creativity. How you make best use of the assets provided by architectural education afterwards is driven equally by talent, communication skills and intellectual ability, and not a small amount of luck and confidence.

The increasingly urgent question is how to ensure architectural education is accessible to a diversity of people and how it can respond to the evolving needs of the profession.

With the high cost of a long university education, students can expect to graduate with debts of £100,000 or more and little hope of paying it back on the modest salaries generally available to the profession.

I would not have studied architecture in this context and it worries me greatly to think that many of today's aspiring and talented school pupils, those without the backing of wealthy parents, will almost inevitably look elsewhere for their career. There is a real danger that architecture's sustainability, diversity and relevance are diminished, putting its very future at risk.

What is the answer? In my view the situation requires every one of us – in practice, academia, the student body and government – to take responsibility. We need to pull together and respond to this issue, urgently.

There is a real danger that architecture's sustainability, diversity and relevance are diminished, putting its very future at risk

The RIBA's Education Review, the most rigorous and collaborative review of architectural education in 50 years, is well underway and deals practically with many of these issues; a 'Compact' is being produced to formalise best practice for employing students during their professional experience. RIBA student mentoring is proving popular. The RIBA's practice team is working with a trailblazer group of forward thinking practices to spearhead the development of a higher apprenticeship model for architectural education and training. Several schools of architecture are developing more flexible study models that offer greater earning opportunities for students during their education.

We urgently need to build on these examples and increase the number of affordable routes. We need to provide more mentoring for both career and pastoral support through all stages of the architectural career cycle. We should encourage more reciprocal relationships between academia, practices, researchers and students, and spread the message about such innovations.

'We have to train the students to become architectural entrepreneurs,' says Odile Decq. 'You have to give them skills and possibilities to understand who they want to become. This is a different kind of education.'

How can practitioners get involved – and how will they benefit?

I would encourage every practitioner to head into their local school and talk about the rewarding career that architecture offers, and the support that is available, from the RIBA, practices and architecture schools.

Flexible study that includes practical experience can boost technical and professional skills, and courses offering live projects allow students to develop hands-on knowledge and engage with end users, clients and other professionals – valuable starter skills. There are huge benefits for architects who engage in academia, and practices that collaborate with architecture schools can help students appreciate business skills and social responsibility.

For the sake of our profession, practitioners must engage directly with academia and students to make 21st century education more flexible. As Benjamin Franklin said: 'An investment in knowledge pays the best interest'. We must ensure that it does. ●

@JaneDuncanPRIBA. architecture.com

DISCIPLINARY REPRIMAND

On 23 February 2016 a RIBA Hearings Panel found that Mr Charles Welsh breached Principle 3.5 of the RIBA Code of Conduct in that he did not have in place effective procedures for dealing promptly and appropriately with disputes or complaints. They also found that he breached Byelaw 4.1 in that he behaved in a manner unacceptable in a professional person.

The Panel decided that the sanction for this be a public reprimand.

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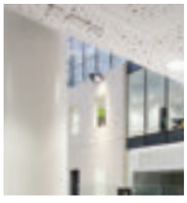

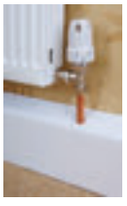

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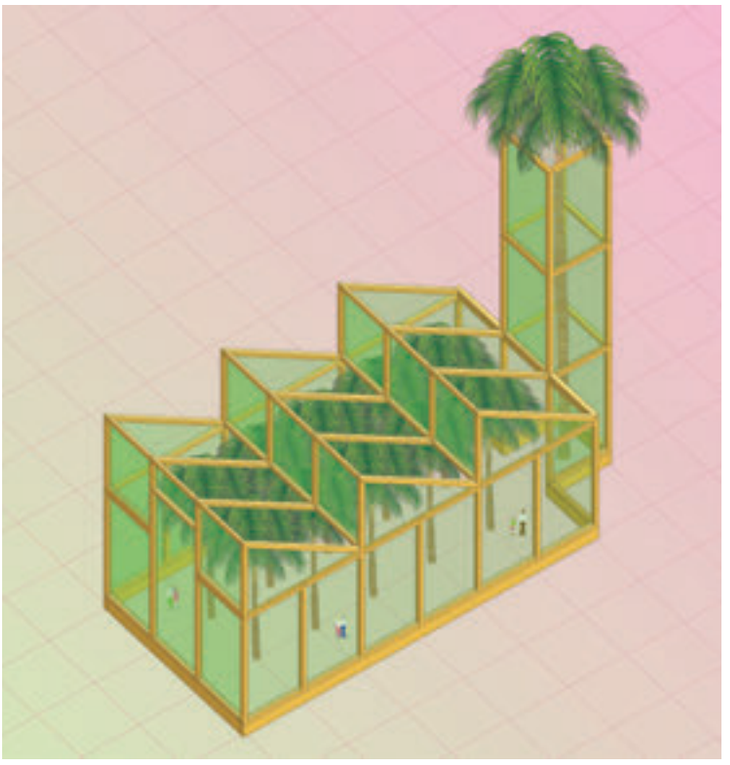


Left The glasshouse as envisioned by Charles Holland and Elly Ward of Ordinary Architecture.

Glasshouses offer the promise of openness and freedom, in a ghostly representation of architecture

Charles Holland and Elly Ward

The glasshouse holds a particular place in the history of modernism. It represents both a point of origin and a recurring dream. For the early moderns, Joseph Paxton's Crystal Palace, designed for the Great Exhibition of 1851, offered a radical break with the past, a moment when (supposedly) rational engineering and technology would sweep away the stultifying grip of all that architectural history.

The glasshouse is a form of anti-architecture, the negation of building with all its heavy-walled certainty. Skeletal and transparent, glasshouses are like ghost buildings, an ethereal, barely-there kind of architecture. Yet they carry a heavy load of symbolism: transparency, openness, endlessness, freedom. From Bruno Taut in the early 20th century to architects like Lacaton and Vassal today, the ethereal, immaterial properties of glass buildings have fascinated the architectural avant garde. One could say the ultimate glass house lies in Italian firm Superstudio's late 1960s collages, where the architecture has vanished altogether, leaving us free to roam the globe unconstrained, like digital nomads.

All this might seem a high-falutin' way to describe what is often a very ordinary building type. After all, many of us have glasshouses, small garden structures used to grow tomatoes, store bags of peat and hang up our secateurs. These cheap structures might be a long way from, say, Philip Johnson's exquisite Glass House in New Canaan, Connecticut, but even in the humblest the normal rules of nature are enhanced and distorted. Inside them the world is a little more fecund, a little more exotic and the vegetation more abundant. Glasshouses are representations of the world shrunk down, collapsed geographies of climate and eco-system.

And they themselves can be pretty huge. The largest greenhouse in the UK is called Thanet Earth in Kent and occupies 9ha. That's a lot of tomatoes: 225 million to be exact – about 12% of the UK's consumption – and they are picked every single day. Its vast expanses of glass shimmer, reflecting the sky and surroundings. This is the industrialised version of the Garden of England.

Our glasshouse plays on this theme of the industrialisation of nature and the (hyper) productive landscape. But it also refers to the exotic, often extraordinary character of Victorian glasshouses with their elaborate profiles and figurative elements. It mimics an archetypal factory building, playing on the expressive potential of the frame to create outlines, a little like an un-rendered three-dimensional computer model. But it could also be part of a range of glasshouses, each shaped like different building types: factory, church, terrace, tower block. Together they could make up a small town of glasshouses, a new form of 'rural' settlement reflecting the scale and economic importance of contemporary market gardening.

The glasshouse depicts an outline, a silhouette, filled in by plants and the accoutrements of gardening. In this case, the implied 'trees' of classically-derived column structure are literal palms, grown to form a structural grid. Here the leaves, plants and vegetal forms of classical ornamentation also provide the building's construction system.

It combines both beauty and utility, the simplicity of the 'kit-of-parts' tuned to create something more expressive and figuratively communicative. In this sense, our glasshouse would no doubt be anathema to those early moderns obsessed by the abstract qualities of Paxton's Crystal Palace. Our design delights in the ambiguities of the glasshouse, its ability to be both architecture and not-architecture at the same time. It accepts the functional aspects of the glasshouse as a given, but attempts to 'add back' culture.

The glasshouse's spectral presence is increased by its mirrored base, so it appears to float in its context. It is both more like a recognisable building and less, a suspension of the everyday and distortion of the ordinary.

Cafe culture: vPPR founders left to right, Tatiana von Preussen, Catherine Pease and Jessica Reynolds

vPPR lit up the architecture world with its ingenious Ott's Yard houses three years ago. Rapid growth and two babies later, the busy partners find themselves in demand

Words: Hugh Pearman Portrait: Sarah Lee

Friends united

I'd just been at the Royal Academy, where the life of architect Michael Manser was being properly celebrated. As I slipped in at the back, I found the two architectural Lords, Foster and Rogers, standing side by side, listening to a peroration by Sir Michael Hopkins. This, then, represented the generation of architects who came of age professionally in the early 1960s. Then I set off east for Bethnal Green to see what the post-Crash generation of architects is up to. I found the three founders of vPPR in their local café, a gluten-free kind of place just round the corner from their 12-strong studio in a streetful of other architects and designers. What clues could they provide?

If the Foster/Cheesman/Rogers/Brumwell Team Four of 1963-67 personified a new kind of architecture which announced its arrival with a famous family house – Creek Vean – then vPPR is following the time-honoured pattern. The practice came to attention in 2013 with its yin-yang pair of triangulated houses in London's Tufnell Park, Ott's Yard. It won awards, and the practice has been growing slowly ever since – in the size and number of projects along with staff numbers. Ott's Yard, like Creek Vean, was an insider job, involving family money. And the partners of vPPR, like most of Team Four, are friends from architecture school who gained youthful experience in the USA before making the decision to set up in practice back in the UK with that family help. Both practices found themselves feted in glossy magazines from the off. So has nothing changed in architecture in more than 50 years?

Well, there is no northern working-class equivalent of Foster in the set-up that I can detect. Moreover vPPR was founded as an all-female Team Three, so to speak: Tatiana von Preussen, Catherine Pease and Jessica Reynolds, pals from Cambridge days who went their separate ways, got Cambridge out of their systems by working in different places on a variety of projects – and then found themselves, aged around 27, in an economic meltdown. Pease was in the New York office of SOM at the time, on the team for Mumbai Airport. Von Preussen had finished working on the High Line with Field Operations. Reynolds was working for facade design practice Front. All three had taught and critted between them at Princeton and Columbia, the AA and Cardiff, and had previously packed in useful experience at UK practices including van Heyningen and Haward,

TATIANA VON PREUSSEN

All of us in our respective offices felt that we wanted to take control of our own destinies and not wait for someone else to do it for us

Left The Ott's Yard triangulated roofscape, planted by Arabella Lennox-Boyd.
Below The dramatic interior of Vaulted House, Hammersmith.

Stanton Williams, Dive and Stephen Taylor Architects. So what to do next, as the world economy took time out and redundancies began, with the three of them in New York? 'All of us in our respective offices felt that we wanted to take control of our own destinies and not wait for someone else to do it for us,' says Pease. The friends tried working together on a project for a cookie store in New York. The client didn't proceed, but the exercise proved they could do it. So they hatched a plan: bring the practice back home, make use of the downturn by finding and buying a site, build a self-generated project, and take it from there. Thus Ott's Yard came into being.

It's true that they had liquidity and connections to call on which plenty of their contemporaries didn't. In that sense it's an old-fashioned kind of set-up. But they'd also acquired something of an American attitude. 'In New York,' says von Preussen, 'there's this air of entrepreneurialism around.' Nor has vPPR gone into the super-prime, lush-interiors world that a certain kind of architect is drawn to. They are distinctly resourceful. They showed me a model of a Swiss holiday home (family link there), the rooms spiralling around a little sheltered courtyard, while the next project after Ott's in 2015 was another landlocked award-winner for a private developer client, Vaulted House in Hammersmith. Upmarket, certainly. But they also gave me a sneak preview of some of their social-housing projects in Croydon. The practice's flair in making the most of awkward bits of left-over urban space – which after Ott's Yard brought private developers calling – is proving very worthwhile as the south London borough seeks to densify its affordable and rented stock through high-quality infill (Profile, RIBAJ, September 2016).

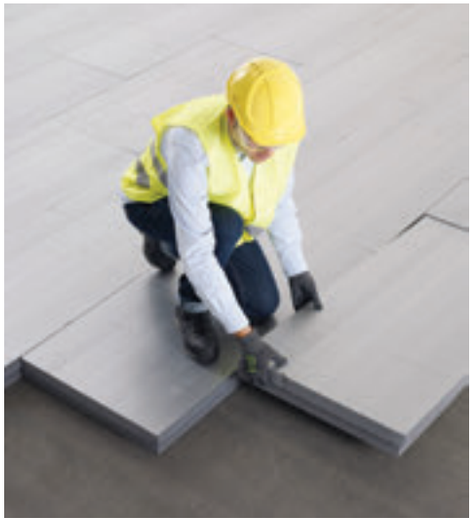
The practice is a confederation of equals – there doesn't appear to be a boss, and the three are adept at waiting their turn in conversation so everyone gets to speak. But there's been a time when, for good reasons, Pease was left pretty much in sole charge. Those reasons are that the other two took maternity leave more or less simultaneously, and have not long returned. It helped that Pease lives in one of the two Ott's Yard houses next to van Preussen, and weekly project crits between the three continued, but still – the fact that two-thirds of the founding partners found themselves otherwise engaged at a crucial moment of growth for the young practice demonstrates the level of determination they have. They were never going to let this be an obstacle.

Unlike, say, an illustrious architectural triumvirate of the past, Ahrends Burton and Koralek, this is not a federation of three

IONA MARINESCU

Cosy classrooms in Yorkshire

Dow Building Solutions' XENERGY SL has been specified for a major new construction programme in Yorkshire schools



XENERGY SL, a highly moisture-resistant flat roof insulation from Dow Building Solutions, has been specified for one of the largest newbuild educational projects in the UK.

The two-year programme, which will be completed in three phases, will involve new building works at 15 Academy schools in Yorkshire, starting with Harrogate High School; Belle Vue Girls' School, Bradford, and Samuel Lister Academy, Bingley.

Each school in the programme will have around 7,000m^2 to 9,000m^2 of 140mm XENERGY SL insulation. The product is being supplied by SIG to Laing O'Rourke, the designer and builder of the projects.

Since the roofs are 'zero-pitch', the specifiers needed a supplier that could not only deliver a top quality product, but also provide expert advice guidance on drainage issues and installation.

XENERGY SL recently became the first XPS product to achieve a Green Guide Rating of A+, which provides a clear endorsement of Dow's success in creating an innovative and sustainable XPS insulation material.

By using CO_2 as the blowing agent and adding infra-red blocking particles to scatter and reflect heat radiation within the foam board, Dow has decreased the lambda values of XENERGY SL by 11% compared to its STYROFOAM insulation boards. XENERGY SL also delivers a Global Warming Potential of less than five.

XENERGY SL, which is the first XENERGY product in the UK, is available in reduced thicknesses compared to conventional XPS alternatives. It also offers 4mW thermal conductivity improvement in various thicknesses.

Paul Davies, national roofing director for SIG, which is a leading distributor of specialist building products in Europe, said: 'XENERGY is a best in class product that we can sell with the utmost confidence. It has some great USPs as it is the only XPS inverted product with a Green Guide Rating A+ and its improved lambda value makes it ideal for the thinnest inverted roof.

'Other key advantages include the fact that it is a UK manufactured product and it is readily available from the Kings Lynn plant on 40ft curtain sided vehicles, or flatbeds for crane offload.'

Richard Powell, sales manager Dow Building Solutions, added: 'Since all the roofs in the new buildings will be zero pitch, this was a particularly challenging project that required detailed assessment of drainage and waterproofing, as well as the highest quality products.

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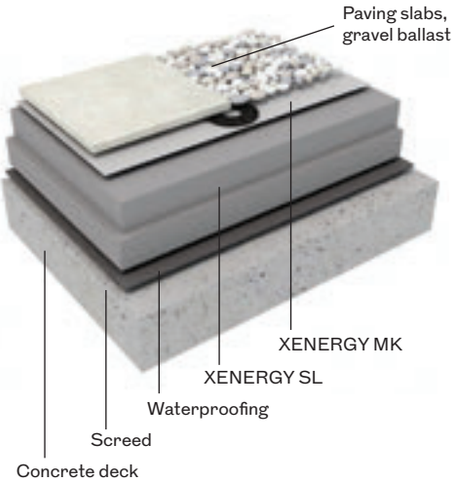

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Below Attention to material detail in the Redchurch Street retail/residential scheme, refurbishing a 1960s block.

Bottom In the studio: the projects are accumulating and growing.

IONA MARINESCU

effectively solo architects. There might not be a vPPR house style, but they share an interest in expressive geometry which is as different from the stereotypical Cambridge 'hair shirt' architecture as it is to the allusive collectivised architecture of another bunch of younger ex-Cambridge practitioners, Assemble. They describe their concerns as 'geometry, landscape and community' and how these weave together. There's an interest in the feel and heft of materials, too – evinced by the refined sand-cast grilles of the practice's mixed-use project in Redchurch Street, Shoreditch. That consists of shops and flats with, uniquely, large windows at the back of the shops overlooking the planted internal access lobby of the flats. The grilles are an integral part of the shop-front architecture in the way that such things commonly used to be. The large mould for one of the castings takes pride of place on the studio wall.

Who knows how their architecture will develop from here? Getting work seems not to be a problem. 'The infill projects keep flooding in,' says Pease, and they count them up – four in Barnet, six in Fulham, plus so far three in Croydon. 'It's a really exciting time for a practice,' says Reynolds. 'They range from 9-12 units, and now 20 units for another client. Every time we do one we refine it.'

Not everything comes up trumps for vPPR – it has had its share of cancelled and on-hold projects including a dance centre in Cardiff designed in fruitful collaboration with Loyn & Co, a culture centre café in Quingdao, China, and interiors for Novosibirsk Airport in Russia. These are signs that the practice is working hard on diversifying. It aims to do a lot more than clever urban infill. Arts and education projects are high on their want-to-do list, says von Preussen.

The firm has a high profile, then, for a practice with a relatively modest selection of completed projects thus far. It's not setting out to revolutionise architecture like the 60s old guard, but the trio are very sure of their direction. Once vPPR lands a seriously big and complex job, just watch it go. They are ready.

For keeps?

What's the best way to protect our architectural heritage? Is listing right for everything?

Tony Chapman

History repeats itself, in the old adage, but when it comes to listing tragedy and farce are mixed in equal measure. Richard Rogers designed Lloyd's in the City as a high-tech kit of parts, capable of being mounted and reassembled, endlessly renewed. And now it's grade I listed, apparently frozen in time like a dancer turned to stone.

Round the corner, Rogers, sitting in his own shiny new Leadenhall building while his old office at Thames Wharf faces redevelopment without the protection of listing, says: 'I'm not against choosing good quality buildings for listing but it's very difficult, there's a tendency to see buildings as frozen music; forget it, everything changes.'

So why do some buildings get listed when others don't? It does help if they're old of course: only 0.2% of all listed buildings were built after World War II.

Piers Gough, a former commissioner for English Heritage (now Historic England), told me: 'HE has two sets of criteria: Unlike earlier periods, listing buildings after 1945 has them jumping through all kinds of extra hoops for no apparent reason. They don't want too many things listed from the 20th century because they don't think it's very popular.'

Other factors in what gets listed are fashion and taste. Brutalism is very much de nos jours and we are soon likely to see many more examples to follow the National Theatre and Preston Bus Station. But what of po-mo? I asked Charles Holland, for whom it was once part of the job description, if he felt listing generally was a good or a bad thing? 'I feel quite torn about it in some ways. Clearly some buildings aren't meant to be there forever. High tech for instance. And I think post-modernism is slightly celebrated ephemerality. I remember when they took the eggs off and replaced the cladding on TV-am building in London; Terry Farrell said that's fine, it wasn't meant to be there forever.'

Just a few hundred metres down the road from Lloyd's is Number One Poultry, which became a heritage cause célèbre in its previous incarnation as the Mappin and Webb building, then seeing off Mies van der Rohe no less and his friend Peter Palumbo, before falling to a shock change of team in James Stirling and Michael Wilford. Asked today which he would have preferred to get built, Palumbo still replies, without missing a beat, Mies. Instead we got a late Stirling building from the late James Stirling. Now the 20th Century Society is fighting for its listing just as the Victorian Society fought for its predecessor. Catherine Croft is leading the fight even though it's less than 20 years old. 'DCMS accepted Number One Poultry was a building of outstanding merit, but they argued that the extent of the proposed alterations weren't enough to qualify it for listing,' she says. Something of a Catch 22 then.

Not surprisingly, Croft is a firm believer in the 30 year rule, giving any building an overview after three decades: 'It's one thing I'd really like to get accepted as good practice. It's always very difficult to look at individual cases in isolation and the context of what else was being built that year is not a bad one.'

Although Gough believes the 30 year rule is arbitrary he admits it's convenient

'I'd really like to get the 30 year rule accepted as good practice. It's difficult to look at cases in isolation and the context of what else was being built that year is not a bad one'

JANET HALL / RIBA COLLECTIONS

Left Richard Rogers' Lloyd's building. He says: 'One must be careful about freezing buildings, I think there's a real danger of that. But I don't regret Lloyd's being listed.'

Right Number One Poultry in the City of London replaced a building that people had argued should be listed; now it is at the centre of a listing debate itself.

JEREMY HARRISON / RIBA COLLECTIONS

Above Farrell's TV-am building in its po-mo prime: the detail matters.

'because it concentrates minds at the moment when things are really unpopular. But what's really scary is that people now don't demolish buildings, they alter them so they can't be listed. If you alter it in the 29th year it's not listable because it's lost some of the features the original architect put in.'

Holland makes a different case for the 30 year rule: 'There's an interesting congruence between the 30 year listing period and fashion cycles in architecture. After 30 years most architectural styles are at the bottom of their appreciation curve. So post-modernism is absolutely at its lowest, although it has started to become quite fashionable in the way that the brutalism was discovered and has become incredibly fashionable.'

The trouble with post-modernism is that by its very nature the architecture is skin-deep with no built-in longevity. That doesn't worry Gough too much: 'I think it will edit itself down quite severely because let's face it, there's not a screamingly large number of really good po-mo buildings.'

But don't those involved in listing have another responsibility, a wider one to architectural history? 'Yes, absolutely there is that responsibility,' he says, 'but in the end the responsibility is to dispassionately assess whether the building is good or not.'

So is listing per se a good or a bad thing? 'Oh per se absolutely a good thing. There are too many philistines and I think people can be very careless of beautiful things, like the Victorians painting out nudes. You've got to be really careful what you let people do.'

The first grade I modernist building was Norman Foster's Willis Faber in Ipswich, listed in 1991 when it was just 19 years old, after Foster himself gave the EH inspectors a tour. Rogers believes the involvement the original architect in the redevelopment process at an early stage is key to a more intelligent listing system: 'This started with Foster's building up in Ipswich, where English Heritage invited him to go round the building with them discussing what was really important and what things could be changed,' he says. 'I was asked to do the same thing with Lloyd's. I think you have to be pretty forgiving as the original architect, otherwise the building is just going to be empty; you can't just have a big empty monument in the middle of the city. There is a tendency – and it's the same with Lloyd's – for a building to become more monumentalised by its freezing. So at first I wasn't keen on Lloyd's being listed but I did appreciate the fact that they took me on board. One must be careful about freezing buildings, there's a real danger of that. But I don't regret Lloyd's being listed.'

TV-am with the TV-am logo taken off makes no sense at all

Gough would also like to see a more intelligent listing system: 'I think listing should be far more rigorous, they should spell out what are the listable qualities and allow you to change things that aren't, things that don't completely mug the building.'

Since 2013 new listings have had something close to that, specifying which parts can be changed; indeed some older listings for commercial buildings in the City of London have been updated in line with this.

Holland agrees: 'The things that are most interesting about po-mo buildings are also the most problematic. So in some ways the blanding out of those elements is the worst case scenario – TV-am with the TV-am logo taken off makes no sense at all.'

The debate that precedes a building being listed or not is often led by the 20th Century Society and is almost as important as the final outcome. It involves the public as well everyone who is part of the process: architects, developers and planners and sometimes politicians. It raises issues about what is important for our cities and that must include their past as well as their future.

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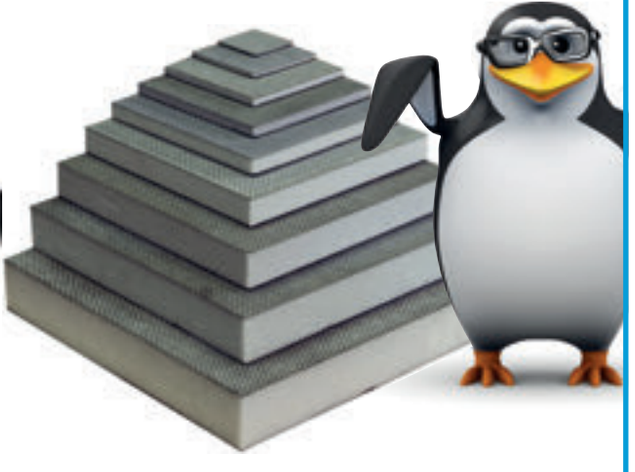

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Exercise your mind

In these challenging essays French art-theorist Hubert Damisch juxtaposes philosophy and architecture to reveal new insights

Michèle Woodger

Noah's Ark: Essays on Architecture is a new translation of work by French art-theorist and philosopher Hubert Damisch. Written between 1963 and 2005, the essays are arranged chronologically starting in the Renaissance rather than Genesis. Intellectually rigorous and thought-provoking, they combine philosophy, architectural theory, anthropology and art history.

Damisch is a leading philosopher of aesthetics, having studied under phenomenologist Maurice Merlau-Ponty and art historian Pierre Francastel. Across his lengthy, interdisciplinary career, he forged ties with key thinkers such as Meyer Schapiro and Rem Koolhaas. As with many academics of his generation, Damisch is influenced by structuralism, a theoretical model expounded by anthropologist Claude Lévi Strauss, linguist Rolan Barthes and their contemporaries in the mid-20th century. (In layman's terms, the school of thought associated with the black-polo-neck-wearing academics of 1950s Paris). Proponents of structuralism are concerned with meanings and representation, and throughout his essays Damisch uses academic terminology which has very specific connotations in this context – signs, signifiers, phenomena or objects, for example.

Damisch sees his essays as 'exercises' in which philosophy and architecture, juxtaposed, reveal new insights, and although some are 50 years old, the essays still offer something new to Anglophone readers. This is due partly to their distinctly French style: it requires a mental leap to engage with a different mode of expression. His sentences are tangential, digressive and circular. Double entendres twist, turn and take the reader into a mental labyrinth. Yet each word is carefully chosen; preoccupied as he is with meaning and representation, Damisch revels in wordplay. How much of 1975, one wonders, did he spend searching for le môt juste in this chapter title: 'L'Autre "Ich" – L'Autriche – Austria or the Desire for the Void: Toward a Tomb for Adolf Loos'? The Frenchness is also evident in the figures he holds up as paragons, most of whom are Franco-European: Derrida, Descartes, Foucault, Lacan, Le Corbusier, Ledoux, Perrault, Prouvé, Sartre, Viollet-le-Duc…

HUBERTT DAMISCH

In 'Perrault's Colonnade and the Functions of the Classical Order' for example, Damisch considers the Louvre palace colonnade. Rather than attributing its appearance to Louis XIV's ostentatious personal tastes, he explores its significance according to Foucault's understanding of order and measure in classical thought, within the wider 16th century logic of grand dessein.

'Against the Slope, Le Corbusier's La Tourette' looks at the relationship between the monastery and its landscape. Geometry, perspectives and horizons are favourite themes for Damisch. He wonders why La Tourette continues to generate interest when its raison d'etre is slipping into the past as the ground falls away from the building (designed for 100 Dominican brothers, only 10 now use it).

This essay discusses the relationship between design and execution, architect and inhabitants. Corb visited the site only three times, left much of the detail to Iannis Xenakis, and did not share the faith of the client. Yet the structures imposed by his design and ideological principle of la promenade architecturale dictated how the monks circulated within the building – which in turn influenced how they meditated and prayed. Was this a way of playing God?

Returning to the watery realm of Noah, in his final essay 'Blotting out Architecture: A Fable in Seven Parts…' Damisch looks to his earlier work A Theory of /Cloud/. Nothing could be further from solid architecture than clouds, yet what interests Damisch is their shifting perspectives. The essay's main focus is 'Blur', the cloud machine designed by Diller + Scofidio over Lake Neuchâtel for the Swiss expo 2002. Damisch reflects on the blurred lines between 'something' and 'nothing' – a paradox, a piece of built architecture which is formless and transitory, a building which literally erases its own facade (effacer).

These essays are certainly challenging. Nevertheless, if you are willing to take on the structuralist 'exercise', it makes for an interesting and mind-expanding read.

Noah's Ark: Essays on Architecture, Hubert Damisch , MIT Press, £22.95 Available at ribabookshops.com

Above Diller + Scofidio's Blur building on Lake Neuchâtel, Yverdon-les-Bains, 2002.

The frameless insulated sliding doors by Swiss manufacturer Sky-Frame blend naturally into their surroundings. So it is hard to say where the living room ends and where the view starts. **SKY-FRAME.CH**

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Indefinable freedom

Visitors to Sri Lanka have a better chance of tracking down and enjoying the work of Geoffrey Bawa with the publication of this handbook

Ian Goodfellow

Renowned Sri Lankan architect Geoffrey Bawa needs very little introduction, particularly in South Asia where his influence has been immense.

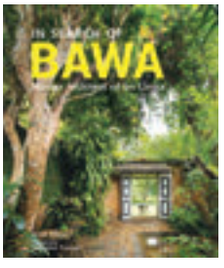
Born in 1919 into a wealthy Sri Lankan family, Bawa initially studied law at Cambridge, worked in a Colombo law firm and travelled throughout the world before finding his true calling in architecture. In the early 1950s he returned to Britain to study at the Architectural Association as a mature student where he became interested in Maxwell Fry and Jane Drew's tropical modernist approach. A great lover of Italy, his final year was spent living in Rome and travelling to and from the AA in the Rolls Royce brought with him from Sri Lanka.

During a highly successful career in Sri Lanka that spanned 40 years, Bawa developed a regional approach underpinned by his belief that contemporary architecture must be rooted in the past and with an understanding of its climate. However, he and his work eluded definition; never wishing to be straight-jacketed into one architectural language he allowed himself the freedom to experiment until the end of his career. He received the Aga Kahn Lifetime Achievement award in 2001, shortly before he died in 2003.

His life and works have been excellently covered by his official biographer, David Robson, in the comprehensive 2003 monograph 'Geoffrey Bawa: The Complete Works', and in the subsequent companion books, 'Beyond Bawa' focusing on his long lasting influence on south Asian architecture and the architects he has most directly inspired, and 'Bawa: the Sri Lanka gardens'.

Since working in Bawa's office in 1994, I have regularly been asked by friends and fellow architects planning visits to Sri Lanka which are his best buildings to visit and where to find them. I have generally responded with some sketchy details before fobbing them off on my long suffering Sri Lankan architect friends to deal with on their arrival in Colombo. I have therefore been hoping that one day a good Bawa travellers' handbook would be published, as neither of the above books could be recommended as suitable travel companions, not least because of their size and weight. Robson's latest contribution is an appealingly smaller format book

Never wishing to be straight-jacketed into one architectural language he allowed himself the freedom to experiment until the end of his career



In search of Bawa, David Robson, Talisman Publishing, HB, 144pp, £14.86 Available at ribabookshops.com

tantalisingly entitled 'In Search of Bawa'.

In the preface Robson sets out his and photographer Sebastian Posingis' key intentions: to catalogue the surviving built work and to draw attention to those that are most at risk, as many of Bawa's buildings have been altered or lost since his death in 2003; and, in line with Bawa's belief that architecture can never be fully understood through words and has to be experienced, to encourage the reader to visit the buildings. Consequently no unbuilt projects are featured. Rather than chronologically, the case studies of the surviving built projects are arranged geographically as a series of 'circuits' to be travelled and maps, although very basic, are included at the back.

The four appendices give a brief overview of Bawa projects: at most risk, transformed almost beyond recognition, demolished or succumbed to the ravages of time, and finally built abroad.

Despite also stating that the book is intended to complement the much larger volume of 2002, the long introduction charting the key stages of Bawa's life and career covers very similar ground. That said, the essay is a concise and highly readable synthesis of the previous, at times overly detailed, text with some additional observations and reflections particularly on the enigmatic nature of the man and the source of his genius. I imagined a dedicated Bawa enthusiast, after a long day of travel visiting projects, relaxing with an arak and ice in one of Bawa's fabulous hotels and enjoying the read – though they'd have to screw up their eyes to see some of the photographs and drawings that accompany the essay as they are generally too small.

The main section of the book contains 43 case studies of built projects of which eight, mostly houses, didn't feature in the complete works, and some may never have been published before. As an aside, the highly celebrated Ena de Silva House, which marked Bawa's shift away from tropical modernism in 1960, might have appeared in the demolished buildings appendix of this book had it not been saved at the last minute by the Geoffrey Bawa Trust. The building has been meticulously transported piece by piece from inner city Colombo and perfectly rebuilt on land adjacent to Bawa's country retreat, Lunaganga.

Although Robson states in the introduction that this is not a book for specialists, it does contain a lot of detail – in the specifics of Bawa's life and in the descriptions of many of the case studies. The visual material, however, tends to the more general, with a prevalence of photographs only occasionally supported by plans and sections.

Bawa believed that architecture can never be fully understood through words and has to be experienced: the book aims to encourage the reader to visit the buildings

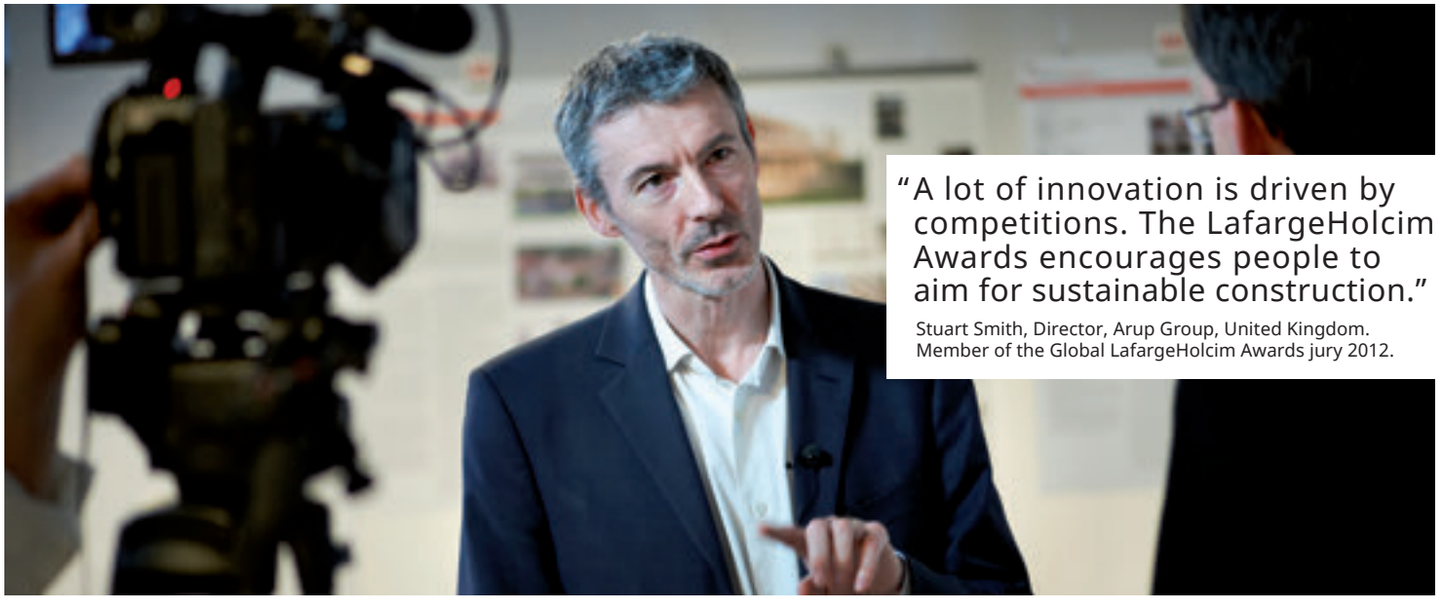
Some of Posingis' photographs are very good indeed, up there with some of the best ever taken of Bawa's work, while others completely fail to capture the spirit of the places and the light is at times too harsh. Layout is also a problem and some of the photographs appear to have been cropped to conform to the design of the page. Many drawings, where they are included to illustrate a project, are reproduced too small to read and appreciate. With the input of a number of very talented individuals passing through the office over the years, including the artist Laki Senanayake, Bawa refined an incredibly detailed drawing style to best represent the texture of the places being created, particularly in their relationship with nature. These are exquisite drawings and it is frustrating to see some of them printed so small. Either they should have been printed larger, or if space was deemed an issue, simpler drawings used.

Overall the book feels slightly schizophrenic, caught somewhere between a Bawa primer to appeal to a broader audience, a more in depth catalogue of his built work, and a travellers' handbook. Nevertheless, until a better travellers' handbook comes along, I will now be tucking this under the arm of those setting off for Sri Lanka to discover Bawa. ●

Ian Goodfellow is partner at Penoyre & Prasad

Left Bawa's Institute for Integral Education (The Subodhi Centre), Pilyandala.

Above Pradeep Jayewardene house.



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Peter Blundell Jones 1949 – 2016

Sheffield professor who combined practice with teaching and writing and had an unerring ability to get to the heart of any proposal

SUZANNE BERRY

'But why do you want everyone to walk past the toilets?' This typically pithy observation – delivered with his familiar mischievous grin – proved to be one of Peter Blundell Jones' last contributions to Evans Vettori, is his capacity as frequent 'guest critic'. The agreed fee for this invaluable service was a hearty lunch. His earlier crit of our embryonic Nottingham Trent University Clifton scheme (RIBAJ March 2016) was instrumental in crystallising the three-dimensional relationships, by interrogating how students would experience it.

PBJ (to all those who knew him) died in August at the age of 67 after a short illness. He lived life adventurously; was a professor of architecture, writer, historian and mentor to many. He was born near Exeter. Both his parents were medics, but he had more artistic leanings.

After studying at the Architectural Association, London, (1966-72) he successively taught at the University of Cambridge, was a freelance architectural journalist, and a reader at South Bank University. In 1994 he became professor of architecture, at the University of Sheffield. He was passionate and prolific, writing around 550 journal publications (many for AR), and 20-odd well-known books including definitive works on Scharoun and Häring with a gift for analysing and explaining highly complex ideas in easily accessible and entertaining language.

He had an archetypally professorial appearance – bookish, with goldfish-bowl glasses and slightly awkward gait. But he was full of surprises. Not content with being an eminent academic, he loved to be involved in practice and building. He once showed me round the fiendishly complex 'Roundhouse' in Devon, which he had designed for his parents, soon after qualifying. It had clearly been a test-bed of his architectural thinking. Sure enough, we found his mother sitting in his purpose-designed central 'cockpit' – an idea we have since recycled on our own house designs. His idyllic mill conversion in Grindleford was published in The Architects' Journal, and won several awards. More recently, he converted another derelict building in Hesdin, near Calais. PBJ was also a practical man. To my amazement, he revealed a passion for motor mechanics. His choice of cars typified his tastes – Citroen CXs and Alfa 159s. He also relished log-chopping and paddling his coracle out into his millpond.

For his 50th birthday, not for him the normal boozy party. The local art-house cinema was hired out for a showing of Jacques Tati's 'Mon Oncle'. His gleeful guffawing reminded us that he, like Monsieur Hulot, was something of a technophobe, who enjoyed poking fun at the follies of 'modern living'.

When I first met Peter at Sheffield in 1994 I was rather in awe of such a famous writer and historian. However, I soon realised how accessible, open and kind he was. While students may have dreaded his forensic analysis, we tutors would try to accompany him on crits, where his questioning would inevitably expose any weaknesses. As so many of those he taught will testify, he had an amazing ability to get straight to the heart of the matter to tell what was important (habitation, spatial sequence) from what was not (lazy assumptions, vain shape-making).

To understand built projects, he insisted on a site visit and on taking his own photos – others' he dismissed as 'not telling you about the architecture'. He always asked for plans and sections to gain an understanding, and was suspicious of image-based architecture. He saw architecture as a social and collaborative art. He taught us that all projects should start with an in-depth investigation of the site's history. Always in search of the authentic, and with an infallible instinct for spotting the phony, he delighted in leading ambitious model-building projects (Victorian Sheffield, Scharoun's asymmetrical Mannheim theatre). He was a natural collaborator with countless other academics, seeking out and supporting many unsung architects such as David Lea, Peter Hübner and Giancarlo De Carlo. As he once said: 'The lesser-known were no less gifted and are no less valuable as examples.'

His premature death has deprived so many of his unique knowledge and intellect, just when he was looking forward to having more time for new ventures, away from the bureaucracies of university life. Peter is survived by his wife, the writer Christine Poulson, their daughter Anna, and children Timothy and Claire from his first marriage. Always humane, he truly was a 'professor who professed'. He will be greatly missed. ●

Robert Evans

IN MEMORIAM

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MS JANET MARIE JACK
ELECTED 1961, LONDON

MR DAVID MICHAEL BRITTON
ELECTED 1976, SHREWSBURY

MR PAUL ADAM SAMSON
ELECTED 1987, WITNEY

MR HOWARD IAN ASHLEY, ELECTED 1952, AUSTRALIA

DR PETER WILLIS
ELECTED 1960, NEWCASTLE UPON TYNE

To inform the RIBA of the death of a member, please email membership.services@riba.org with details of next of kin

Exchange

Moving disappointment

In September's issue of the RIBA Journal there were two articles about encouraging older households of over 55 years to move and release their former family homes for young families.

Very commendable, but the market does not provide a product for those who do not need nursing care. As a 65 year old living in a four bedroom family house, I do not want to move to an apartment, especially not a two bedroom starter home, even if it is on the ground floor. Apartments entail all the problems that noise and anti-social neighbours that can bring, and, yes, 65 year olds can be anti-social too. If I am to move I want a home close to my friends and social scene, and good sized reception and dining space so we can entertain, a good sized kitchen and two double bedrooms with two bathrooms so guests can stay.

As bungalows are not an efficient use of the scarce land resource we have, one of the problems with the accommodation profile mentioned above is that it takes up almost as much space as a four bedroom house, which a developer can sell for more. One of the incentives for older households to move is to release some equity, but if they have to pay as much as the price for a four bedroom house they might as well stay where they are. However, the bigger problem is where these local sites will come from, especially in urban areas where land is at a premium.

This is a problem I have come across in my career since the 1980s and still there is no solution.

William Luck, via email

Opportunity for change

In Gary Taylor's erudite letter (September 2016 issue) he points to the prospect of a future as part of an expanding world economy, rather than being constrained by a diminishing EU economy. The 1980 report 'North-South: a programme for survival', presented by an Independent Commission on International Development Issues chaired by Willy Brandt, stressed the need for affluent northern countries to urgently help their poorer southern neighbours. Long term reforms were proposed, including a new approach to international finance; the development of means of production assisted by new technologies; and redirecting massive expenditure on armaments towards the urgent needs of the many millions living in poverty. Without a major shift in attitudes the commission questioned whether the world could ever achieve peace if large sections of the south were shut out from any real prospect of progress and left on the margin of survival.

This 1980 report has until now been largely ignored but Brexit provides us with an opportunity for the UK to act as a world leader in demonstrating, to a rather inward thinking EU, that now is the time for real change.

Robert Oak, Shrewsbury

We welcome letters but retain the right to edit them:
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66 Portland Place,
London W1B 1AD

The wrong steps

I take a particular interest in the proposed Garden Bridge London SE1/WC2R.
My detailed study has surprisingly revealed that there is a significant error in the design of the staircases.

Transport for London anticipates 7.1 million visitors a year to the bridge.

The primary route across the bridge is via five staircases, a total of 121 steps/risers.

The other route across the bridge is via lifts – two six-person lifts at each end.

The error in design is that all the staircases have too many steps/risers in a single flight. The most extreme case is a staircase with 21 steps/landing/20 steps. I believe there is no other historic staircase in the public domain in London with a flight with as many steps/risers as 20.

Current good practice in staircase design is contained in the Building Regulations, which state that for buildings other than dwellings, the maximum number of steps/risers between landings is 12.

The staircases of the proposed bridge are a significant discrimination regards mobility and age and also there are basic health and safety implications.

Peter Foulsham, London

Tweetback

Our article by Tony Chapman on listing modern buildings (P.100) has already caused various reactions online…

The Victorian Society
@thevicsoc
@RIBAJ Did you not think of talking to the horse's mouth? @HistoricEngland might have a useful perspective as they run the listing system..

@postoccupant
Crikey, Number 1 Poultry is making me feel my age...

Our archive photo in September of an eyecatching Irish pub with painted rustication – linked with artist Giles Round's RIBA commission – is proving popular….

Luke Orion McDonald
@OrionMcDonald
@hitoneie @RIBAJ
That would be fresh today, incredible

Aisling Nelson
@3thoughtbbls
@hitoneie @RIBAJ Brilliant! Reminds me of some of those graphic Lisbon tiles.

And senior editor Jan-Carlos Kucharek's account of O'Donnell + Tuomey's St Angela's College in Cork (September issue) brought forth a fan:

suzy corrigan
@suzycorrigan
@RIBAJ love it when Carlos gives it the full altar boy in a crit!

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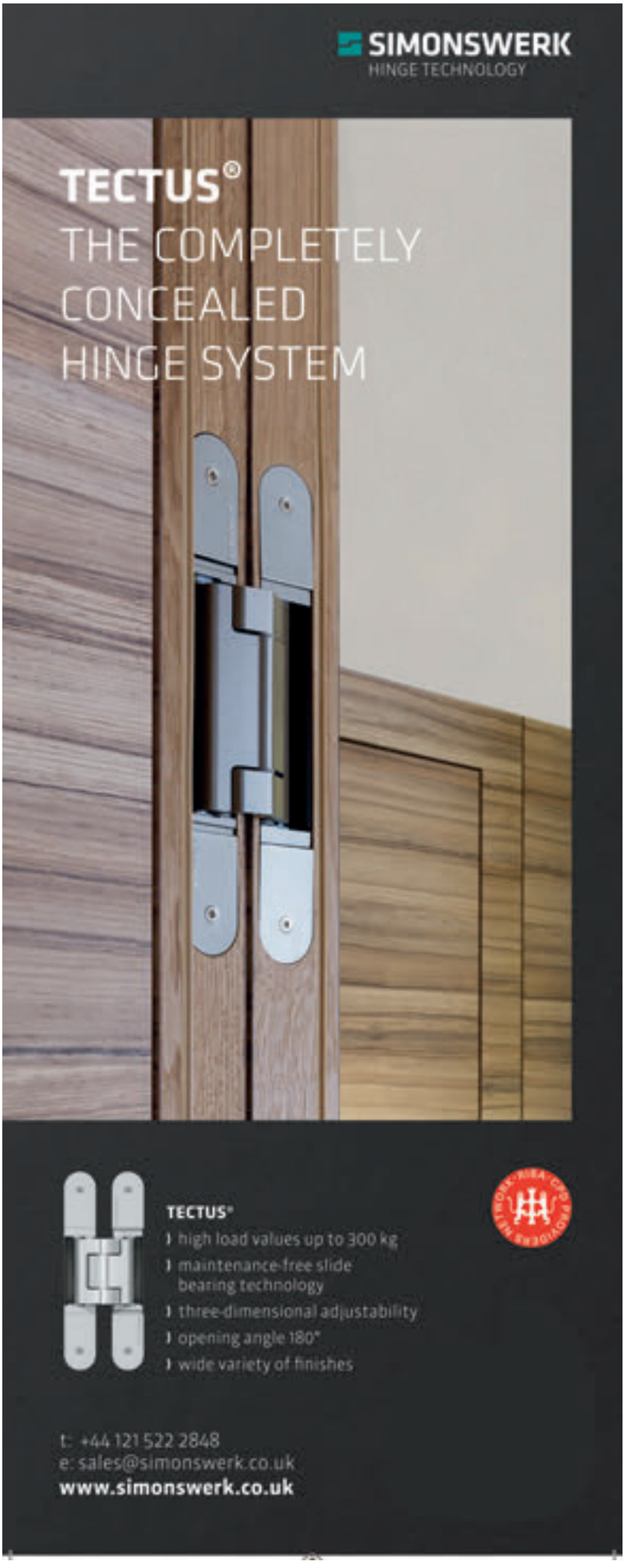

RIBAJ Event: From Design To Build – Taking Control Of Fire Safety

The Building Centre,
Store Street, London
WC1E 7BT
7 November 2016,
08.50 to 11.45 am

SPEAKERS INCLUDE;
Peter Caplehorn, Deputy Chief Executive and Policy Director, CPA (Chair)
Wilf Butcher, CEO, Association for Specialist Fire Protection
Paul Bussey, Technical Consultant, AHMM
Alex Double, Director, A D Design Consultants
Wayne Early, Associate, Buro Happold

Join us at this free-to-attend, half-day conference to hear how you can protect assets and save lives in the event of fire by taking control of all aspects of firestop planning and installation – from design to build.

Following on from last year's successful RIBAJ and Hilti seminar, you will be updated on current firestop best practice and hear how these developments are being realised in current UK building projects.

The morning will begin with a panel session and Q&A that will discuss supply chain management, the dangers of PU foam, and how best to carry out a fire assessment and firestop recording of a building. Following a short break we will conclude with two case studies including Harbour Central, a new prime residential block in London's Docklands.

More information please go to www.ribaj.com/events/hilti2016

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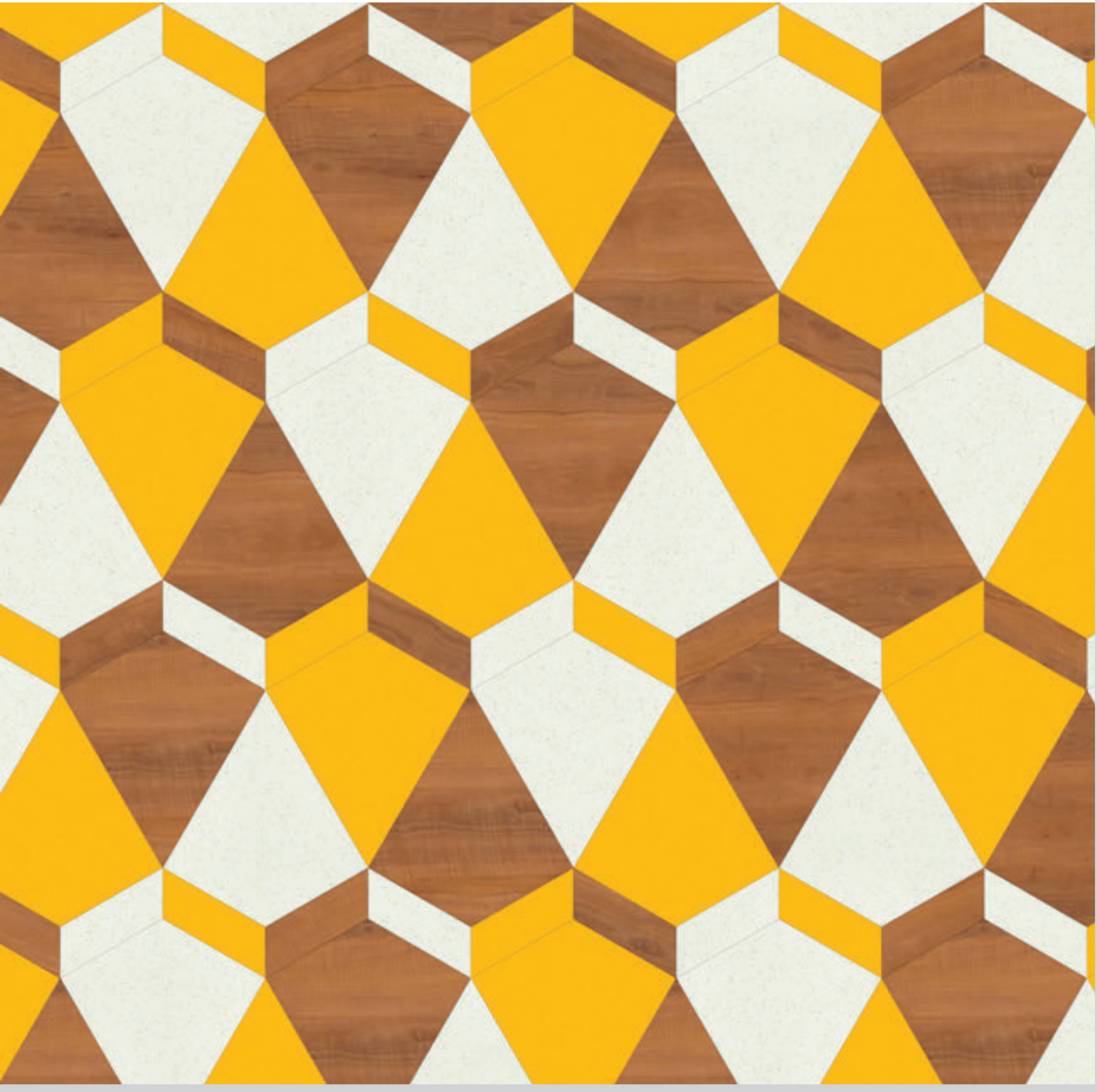
design competition

2016



New directions Amtico

It gives me great pleasure to introduce this showcase of flooring designs created by architectural practices as part of the Amtico and RIBA Journal Design Competition.

Amtico has embodied the spirit of creative flooring design for over 50 years and encouraged those involved in the delivery of interior space to celebrate the originality that can be achieved from combining our Luxury Vinyl Tile collections. Our challenge is always to deliver high quality finished projects speedily while giving the building occupier something that reflects their originality and purpose.

Design is at the forefront of what we do and we wanted to extend the boundaries of our New Signature Collection this year by introducing Designers' Choice – a collection of 84 beautiful product combinations created by our in-house design team. This curated range blends colour and finish for both commercial and residential environments.

Amtico is always celebrating the diverse ways in which our products are combined by the profession. We wanted to explore the endless possibilities of combination through a competition encouraging architectural practices to create innovative flooring designs in a way which harnesses the capabilities of the range and reaches out to the imagination.

For the six competing practices, it was a bold and thoughtful process and the chance to see their designs produced as part of Designers' Choice 2017 – the competition prize. The standard was exceedingly high, which made judging very difficult. The winning design is revealed inside.

We're very proud of how our new collections showcase British design and manufacture. We know how important it is to be innovative, and it has been terrific to collaborate with the RIBA Journal and the RIBA Education Fund.

The RIBA Education Fund is a fantastic charity that provides architecture students with hardship grants. Through this campaign, Amtico is supporting this charity, both now and for the long term, with a proportion of royalties from the sales of the winning design going to fund its essential work.

I would like to thank RIBA Journal for their support and congratulate all participants who demonstrated such talent and hard work in creating these truly individual flooring designs. We are looking forward to see the designs go to market in 2017 taking Designers' Choice in an exciting new direction. ●

Phil Southall
UK Sales and Marketing Director – Amtico

CONTENTS

114 Foreword
115 Introduction
116-117 Briefing day
118-121 Judging day
122-125 Winner
126-135 Runners-up
136 Q&A

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Cover image: **Tongan, by WHAT_Architecture (p10-13)**

A pattern language RIBAJ

Patterns have been celebrated for millennia through different cultures' observations of the natural world. This reached an abstracted apotheosis in the walls of the great palaces and mosques of Isfahan and Istanbul, and further west in Granada and Cordoba. So in many ways, these traditions made the challenge Amtico presented to our six invited UK architectural practices all the more demanding; to come up with new design concepts for their bespoke Designers' Choice Luxury Vinyl Tile collection, that no-one had seen before.

And I have to say that, after a lot of head scratching and swatch switching, those practices rose to that challenge. We were initially encouraged on the briefing day at Amtico's Coventry factory by their grasp of the situation, and were ultimately truly impressed by the concentration, intelligence and energy that each of them brought to addressing it. On the judging day in July all the teams came together in central London to see all their layouts produced as full scale, room-sized sample boards, ready to present to our team of expert judges.

While all the judges were impressed by the individual design narratives – ranging from nature, to the peculiarities of Clerkenwell, processes and Polynesia – what they were most struck by was the professionalism that they all brought to their proposals. It was encouraging to see that core attribute of architects, to bring a sensibility to everything that they design, play out even in the field of flooring. The level of thinking applied to this task seemed as high as for a whole building. And it produced for us, thanks to Amtico's design brief, some genuinely fascinating results.

Victorian architect Owen Jones' seminal book 'The Grammar of Ornament' might not, on the face of it, have been the primary inspiration for any of the designs. But in all the teams' analytical approaches to patterns and colours evidenced here, we'd like to think that they proved themselves very fitting disciples of his legacy. ●

Jan-Carlos Kucharek
Senior editor, RIBAJ

Briefing day

Last year Amtico contacted the RIBA Journal to enquire about launching a competition together. To coincide with the launch of the firm's latest flagship tile designs to its premium Signature Collection on 9 June, it wanted to challenge teams of architects to create new design combinations taken from Signature products, as an addition to the Designers' Choice collection. This is a collection of 84 beautiful flooring designs created by Amtico that can be specified for any type and size of space. Predefined and ready to use, the product combinations across 14 laying patterns make specifying attractive and durable floors quick and easy.

Using Signature products and set laying patterns, the idea was to invite architects to bring out the best combinations and to add architecture's unique design perspective to existing and future flooring products. The winning collection would go to market in 2017 as an exclusive architect-designed Designers' Choice product. A proportion of royalties from sales of the new design would be shared with the winning practice and the RIBA Education Fund, which helps architecture students experiencing financial hardship. The RIBA Journal was to choose the practices, drum up interest and publish the results.

So earlier this year, Amtico and RIBAJ invited six practices in teams of three to compete. Both young and up-and-coming and more established firms were brought along, including Cousins & Cousins, DLA Design, Moxon Architects, TP Bennett, What Architecture and Willmore Iles. Then, back in May we all travelled up to Amtico's headquarters in Coventry to kick-off the design thinking with the competition launch.

The whole day was about fostering collaboration and getting under the skin of the products, as well as understanding how, as the only such Luxury Vinyl Tile products to be fully designed and manufactured in the UK, they are made from beginning to end in the on-site factory.

Phil Southall, UK sales and marketing director at Amtico, got the day started by introducing the company. Founded in 1965, it is one of the largest manufacturers in the city and was the first brand in the country to make Luxury Vinyl Tiles. Teams were then briefed on creating their own set of six flooring designs based on a theme to be submitted in June. Of these, three designs would then be selected by Amtico based on

Opposite Amtico sales and marketing director Phil Southall briefs participants.

Top Participants discuss the challenges of the competition.

Above Competitors visiting the cutting room as part of a tour of Amtico's Coventry factory.

Right Amtico senior designer Sarah Escott explains the variety of laying patterns and product designs that the participants can work with.

PHOTOS: DUNCAN SMITH

their marketability and made up by Amtico into real-life prototypes for the judging process in July.

But before going out into the world to think up themes and combinations, the teams got stuck into the production process to understand how it works. This meant first a factory tour from Amtico head of technical Gary Wilson, and then a look at the design studio with Lorna Williams, head of product design and creative branding. Here everything works symbiotically to ensure the most advanced designs are met by the latest manufacturing processes. A longer examination and description of the processes involved can be found in the July/August 2016 issue of Products in Practice, pp.12-13.

After a social lunch meeting with the designers, the afternoon was spent getting to know the Signature collection of products that the architects would use in their laying patterns. Amtico's in-house designers Karen Quarterman and Sarah Escott took the groups through the endless possibilities and pattern variations, with an exclusive first look at the company's Signature collection and latest online planning tool for specifiers, as well as its newest tile innovations Umbra and Chroma.

Inspired by a long and intense day, the teams clearly left brimming with ideas of what to do next.

Judging day

JUDGING DAY PHOTOS: CHARLES GERVAIS, BOTH HEMISPHERES PHOTOGRAPHY

The conclusion of the Amtico Design Challenge took the form of a grand 'Pattern Off', with the six finalists presenting their entries in the competition to produce the most creative appropriation of Amtico's Designers' Choice Luxury Vinyl Tiles as an extension of its Signature collection. The deciding event took place in a studio in London's Southwark during the summer. Amtico had already whittled each entrant's six patterns down to three and had produced these as 2.4m by 1.2m display boards.

The format of the final was that each team had a strictly-monitored 10 minutes to present all three designs to the judges and other contestants before taking questions from the judges, who then proceeded around the space to the next contestant. After all six presentations, the judges retired to confer, then returned to each team in turn to offer a short critique of their entries before announcing the winner.

Looking around the entries it was clear that the teams had gone to considerable effort to present their designs, which were accessorised variously with mini room-sets (TP Bennett) jars of hair and leaves (DLA Design) and even a live dog (WHAT_ Architecture).

Several entrants drew inspiration from nature, with Moxon Architects exploring landscape formations and TP Bennett looking to air, water and sun. Place was another theme, with both DLA Design and Willmore Iles using characteristics of their respective home turfs of Clerkenwell in London and

Above Teams presented their three final designs in a London studio in front of judges and fellow competitors.

Opposite Charles Holland makes a point to fellow judges and competitors during the presentations.

THE JUDGING PANEL

Sarah Escott is senior designer at Amtico

Charles Holland is director and co-founder of Ordinary Architecture and is a former director of FAT

David Kohn is the founding director of David Kohn Architects

Zoe Laughlin is the co-founder and director of the Institute of Making and the Materials Library project

Flora Samuel is chair of the RIBA Research and Innovation Group

Lorna Williams is head of product design and creative branding at Amtico

JIM STEPHENSON
JULIAN ANDERSON
JOE MCGORTY

Bristol as springboards to generate the narrative and design of their patterns.

Cousins & Cousins instead took inspiration from encaustic tiles as its starting point while WHAT_Architecture challenged the parameters of the competition with a rather different interpretation of what constitutes a repeating pattern. Rather than produce just a conventional repeat, its entry was derived from a concept for one evolving design across the same laying pattern over a 20 by 20m area. The speculative aspiration was to offer a choice of options depending on which part of the laying pattern was chosen.

During the judging, there was discussion about timber-effect designs, in particular their use by entrants to effectively evoke other natural elements such as landscape formations, water or sun, which some judges found an interesting conundrum. Instead, the panel was rather more interested in patterns that combined Amtico products in a fresh and engaging way.

Several individual patterns caught judges' attention. Moxon's all wood-effect design was singled out for its softness. Cousins & Cousins was praised for being willing to take a risk with its Art Deco feel stepped pattern, which was considered fun and elegant. Willmore Iles' North Street pattern appealed to some judges for how it brought the idea of external urban space inside a building while David Kohn and Zoe Laughlin appreciated the depth of the woven tartan Queen's Square, which, she said, 'unlocked something about the material that

we hadn't seen before'.

With its instantly engaging narrative, judges could imagine DLA Design's Clerkenwell collection being marketed commercially and having an appeal internationally. TP Bennett was praised for a very coherent presentation of its biophilia concept, which clearly explained the choice of laying pattern and products to create the sky, water and air narrative with useful illustrations of how the pattern could be implemented. Judges could imagine this easily fitting into the Amtico collection.

> The pattern successfully plays with readings of solid and void and 3D and flat… It takes something from the material without insisting on it being read in a certain way

Opposite David Kohn during judges' questioning of the contestants.

Left Amtico's Phil Southall with the WHAT_ Architecture team.

Below Judge Flora Samuel (left) with Rachel Welsby and Cristina Martin of Cousins & Cousins.

Bottom Judges David Kohn, Charles Holland and Zoe Laughlin (right) with Sarah Emilie Vallee of Moxon Architects.

However, the panel instead decided to reward an entrant that took Amtico's collection in a different direction. The overwhelming winner was therefore WHAT_ Architecture, which judges felt was successful and innovative in its ambition to give customers a choice of design harvested from one extensive and evolving pattern. Judges liked the playful nature of the entry coupled with its sophisticated design, in particular the variety of patterns found within the whole and the potential for asymmetry.

'The pattern successfully plays with readings of solid and void and 3D and flat… It takes something from the material without insisting on it being read in a certain way,' said David Kohn, adding that it was the only entry to make strong and contrasting use natural and abstract designs.

'It does weird, very interesting things to your eyes, which is quite compelling,' said Charles Holland of Ordinary Architecture about the Kite laying pattern version, adding that it would bring something quite different to the Amtico brochure.

'They've used the potential of the material to the maximum in terms of creativity,' said Flora Samuel, who also liked its nod towards digital customisation. Zoe Laughlin liked the entry's 'confidence and cohesiveness'.

Amtico head of product design and creative branding Lorna Williams pointed to the 'unexpected and challenging colour mix' that worked very well in practice.

'It's a new narrative for us,' she said, adding that such a confident mix of products really pushes the boundaries of the material. 'It's really exciting.'

The winning repeat design will be launched as a mini-collection, with royalties split between WHAT_Architecture and the RIBA Education Fund, which supports architecture students in financial difficulty.

Winner WHAT_Architecture

Asymmetry was the theme of the winning entry by WHAT_Architecture, which boldly created an evolving, non-repetitive design using a consistent laying pattern divided into different colourways. Conceived as a pattern map of 10,440 tiles covering a 20m x 20m area, this speculative proposal allows the customer to select the portion of the design most appropriate for the room they require the flooring for. Although this concept stretched the brief by creating a macro-scale repeating pattern rather than one on a room scale, the practice's final entry put three areas of the design into a repeat pattern, and these are the designs that will go into production.

The concept allows the flooring pattern to transform as it flows through the space of the house, says WHAT_Architecture director Anthony Hoete, allowing the client to choose sparser or more densely populated areas of the pattern as required, along with one of the colourway zones. In this way, the pattern appears asymmetric, despite the underlying symmetry of the larger source map.

'This converts personal space into a chromatic sequence,' he says.

At the same time, he adds, this approach suits the practice's natural aesthetic tendencies for the asymmetric which it feels is more relevant to the contemporary condition. After all, he points out, most domestic rooms are themselves asymmetric due to the projections of fireplaces, doors or windows.

As part of its development of the concept,

CHARLES GERVAIS, BOTH HEMISPHERES PHOTOGRAPHY

the team explored symmetry and asymmetry with the help of studio 'barkitect' Chiba who was also on hand at the final event. Facial images of Chiba and assistant architects Anna Scibior and Sarka Gulasiova were digitally manipulated to give a comparison between natural asymmetry and artificial symmetry.

'We want to enhance quirkiness and individuality,' says Scibior, adding that the team view asymmetry as a positive.

The practice then came up with a narrative of notional clients Mr and Mrs Barclay, who they imagined as dreaming of escaping on holiday to a Polynesian island, and created an extensive design to show the graduation of the pattern. The South Pacific theme supplied the entry's colour scheme of white, yellow,

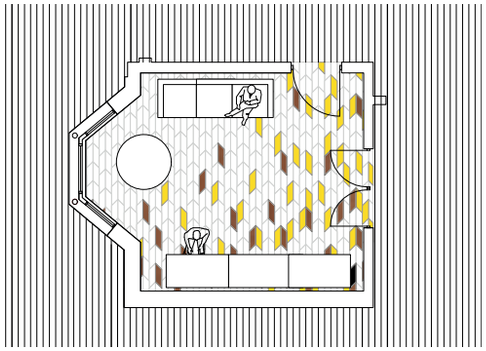
Above left Photos of designers Anna Marta Scibior, Sarka Gulasiova and studio dog Chiba have been manipulated to show how they'd look if their images were symmetrical. These images are shown to the left and right of the original photos.

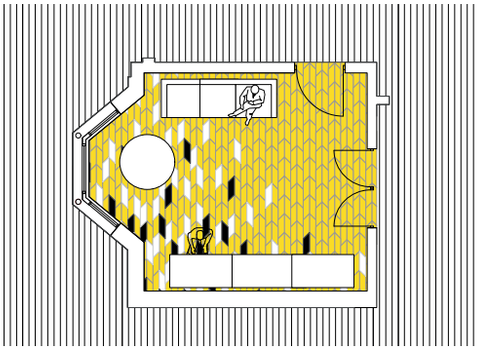
Far left Created using the Arrow laying pattern, the Maori pattern combines Ashdown Plum, Glint Orb and Glint Void.

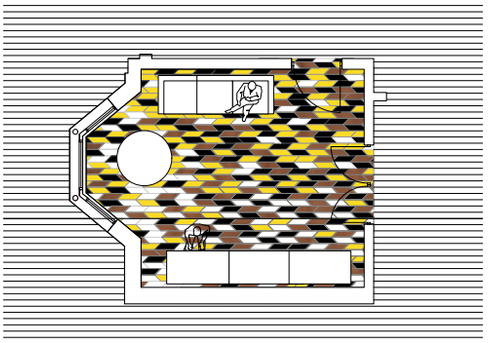
Near left Samoan pattern. Created using the Arrow laying pattern, this combines Ashdown Plum, Glint Orb, Glint Void and Napoli.

Right Initially, WHAT_ Architecture's concept was for a macro-scale repeating pattern of varying density and four different colourways rather than a conventional repeat.

Above right: WHAT_ Architecture team Anna Marta Scibior, Caline Masrehjian and Sarka Gulasiova with Chiba.







Above WHAT_Architecture's concept allows customers to select different parts of the pattern map to suit their room. The practice's designs were put into three repeat panels for the competition final.

Below Judges question WHAT_Architecture about its designs during the competition final.

Right Tongan pattern, chosen as the overall winner by the judges. The design uses a Kite laying pattern with Ashdown Plum, Napoli and Glint Orb products.

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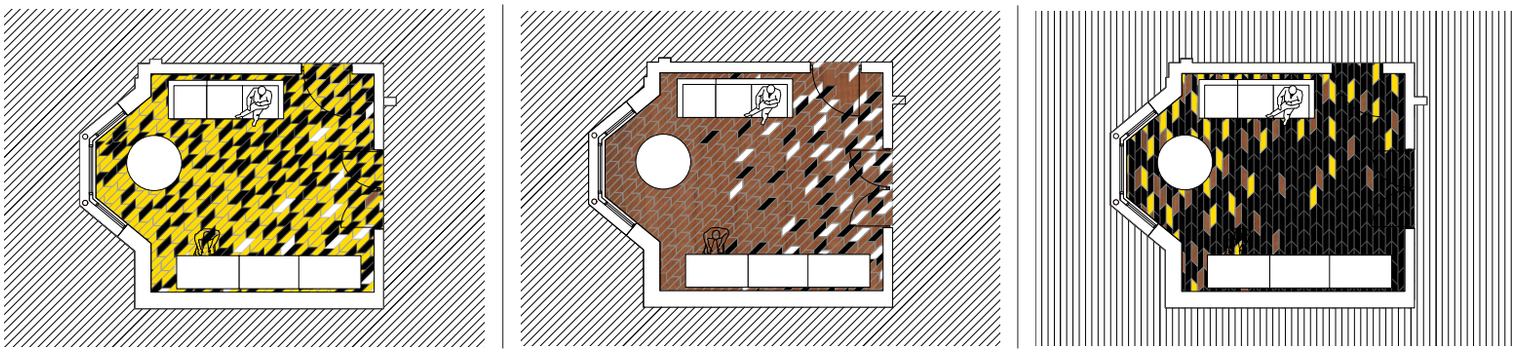


wood and black, but, says Hoete, the design could equally have incorporated a completely different colourway – such as a floral palette inspired by the Chelsea Flower Show, or even a sky blue-led design for a Manchester City fan.

'We're not fixated on the idea that everyone has to love Polynesia,' he says.

The final WHAT_Architecture designs included the judges' favourite, Tongan, which uses the Kite laying pattern and two versions of the Arrow laying pattern.

While Amtico's visualising technology is geared towards repetitive patterns, WHAT_Architecture used the competition to explore ways that the customer might be able to navigate over a macro rather than room-scale pattern map to make its selection.

'If we did exactly what Amtico asked for they could probably have predicted the outcome,' says Hoete, explaining the practice's unorthodox approach to the challenge.

'We didn't want to reinvent the wheel – they already had a great product. We tried to explore the product through existing production techniques. We're not changing the colours of the tiles or the shapes.'

WHAT_Architecture thinks the idea has great potential for residential and commercial applications, such as restaurants and cafés.

'Customisation and taking ownership of the design is very powerful. We think it would be great to find a way to bring it to market,' concludes Hoete.

Runner-up Cousins & Cousins

Ceramic tiles – in particular the encaustic variety – were the inspiration for Cousins & Cousins' entry.

According to senior architect Cristina Martin, the team decided to create patterns based on ceramics to complement the many timber, concrete, stone and abstract designs in Amtico's collection.

'We wanted to create a colourfully patterned ceramic floor and saw that this was missing from the collection. So we thought, why not go crazy with colours and pattern?' she says.

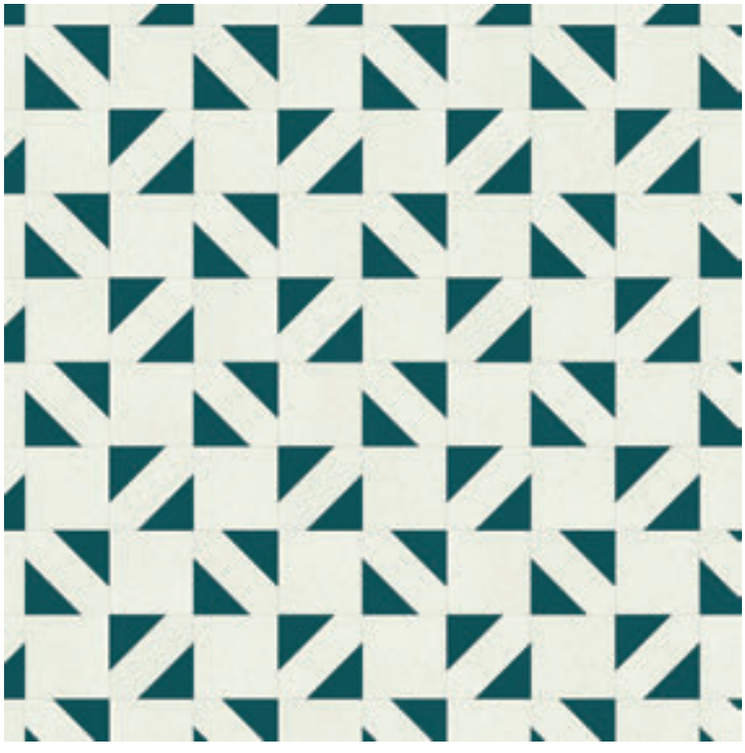
Cousins & Cousins was drawn to the strong geometric nature of encaustic tiles and their contrasting use of pattern. The practice also liked the idea of using white as the backdrop then adding highlight colours to create 'fun and elegant' designs, adds Martin.

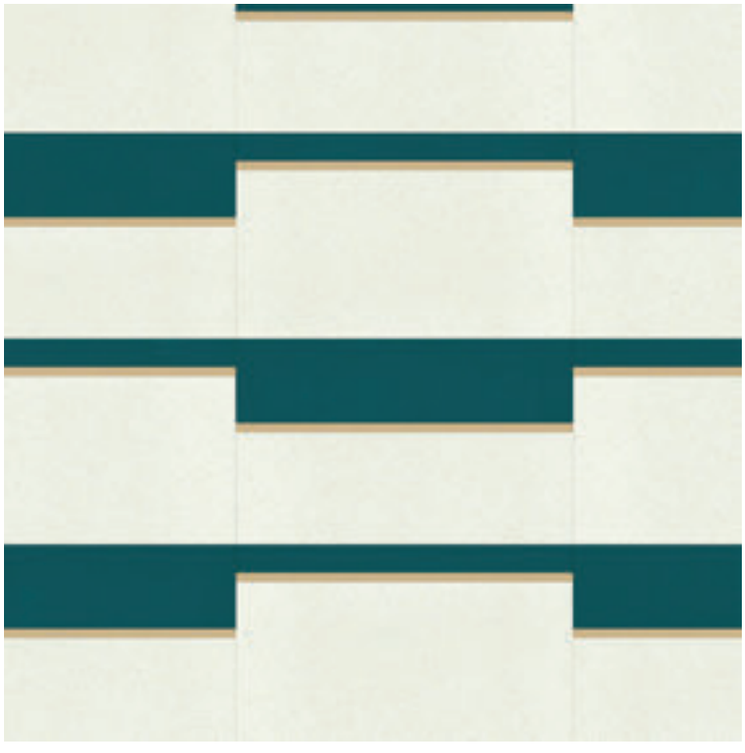
'We see the Amtico encaustic range as a contemporary adaptation of the encaustic tiling tradition, using a flexible, durable and sustainable product to reinvent a tradition that has been used since Ancient Greek times,' says the practice.

Right Patchwork: Pleat laying pattern with Paris, Shimmer Denim, Glint Orb, Graphite Slate and Shimmer Metal.

Below left Mosaic: Woven laying pattern with Glint Orb and Seoul.

Below right Inlay: Varied Block laying pattern with Seoul, Glint Orb and Metal Gold Leaf.





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Cousins & Cousins' final three designs include its favourite, an Art Deco-flavoured stepped pattern created with the Varied Block laying pattern. This uses a thin strip of gold to give a bit of shine as a highlight to the otherwise green and white design. Another green and white pattern uses the Woven laying pattern to create triangles of colour on a white background. Lastly, the third design uses the Pleat laying pattern for a five colour linear design with bold rows of chevrons. This fulfilled the practice's desire to create a pattern using many colours, and incorporates a range of greys with white and blue.

Cousins & Cousins sees potential application for the designs in a variety of sites – such as cafés, bars, restaurant, retail and residential, says Martin, who worked on the project with Jelena Cousins and Rachel Welsby.

Left Mosaic pattern as visualised in use.
Above Cousins & Cousins' Rachel Welsby and Cristina Martin.

Runner-up DLA Design

Jars of hair clippings, screws and leaves helped explain the narrative behind DLA Design's Clerkenwell Collection, a group of patterns inspired by the practice's location in the central London district.

DLA extensively researched its locality to analyse the materials, textures and colours that create the many different types of buildings and places in the area, from cobbled alleyways to historic warehouses, public houses to churches. Each of its three final patterns seeks to evoke the spirit of a different building type. DLA's favourite pattern was Workshop, a linear design intended to convey the metal, brick and timber materiality of such buildings, which are now so popular with the creative industries. Created using the Arrow laying pattern, dark timber and metallic patterns that evoke a rich patina are contrasted with a highlight white washed timber.

Another linear pattern, this time a strident five-colour design formed with the Pleat laying pattern, was inspired by barbershops and uses a red accent to reference the traditional striped red and white pole.

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Opposite Barbershop: Pleat laying pattern with Glint Orb, Rio, Infinity Pulse, Metal Pewter and Metal Foil.

Top left From left to right: DLA Design's Isaac Barraclough, Jake Grousset and Alex Giles.

Centre left Churchyard: Small Parquet laying pattern with Limed Grey Wood, Parisian Pine and Wharf Oak.

Below left Workshop: Arrow laying pattern with White Wash Wood, Chroma Blue and Quill Kohl.

Above: Visualisation of the Barbershop pattern in use.

DLA envisages this bolder pattern being used for events spaces.

The St James churchyard in Clerkenwell provided the inspiration for the firm's third finalist pattern – a softer, parquet design of three heavily grained timber-style tiles. According to architect Alex Giles, the designers sought to evoke the tranquillity provided by the churchyard amid the hustle and bustle of Clerkenwell by focusing on the warmth of the timber, trees and brick. This pattern is conceived for installations such as residential lofts.

Three further designs that weren't shortlisted were inspired by the bustling Exmouth Market and Farringdon station areas and by DLA's local pub. ●

Runner-up Moxon Architects

Moxon Architects took as its starting point the natural feel of wood grain patterns in the Amtico collection and their potential for both subtle colour gradation and contrast. After selecting a number of products, the team explored various combinations in relation to the linear quality of natural landscape formations such as sedimentary striations.

'Derived from characteristic visual qualities of extreme landscapes – canyon, desert, cliff, glacier, dune and crevasse – the collection conveys a sense of pressure and formal development over time,' according to the Moxon presentation boards.

Moxon's three final designs make use of several wood designs, which the designers also felt expressed the linearity they were looking for. The lightest of these, Shale, uses the Arrow laying pattern and combines four grained designs in a pattern of parallelograms with a heavier reddish grain providing the accent notes. This soft, warm design is envisaged for residential or lobby use.

Derived from characteristic visual qualities of extreme landscapes, the collection conveys a sense of pressure and formal development over time

CHARLES GERVAIS, BOTH HEMISPHERES PHOTOGRAPHY

The other two designs are bolder, with both using a gold accent to contrast with darker woods. Vein uses the Pleat laying pattern to generate a broken zig-zag design and is imagined for retail use.

'We wanted something a bit jazzy and funky,' says Moxon architectural assistant Sarah Emilie Vallee.

Aggregate uses the Kite laying pattern which features interlocking rows of kite shapes with a border of narrow parallelograms. Moxon originally envisaged this in darker colours for a formal dining room or gallery setting.

Left: Shale: Arrow laying pattern with White Wash Wood, Limed Grey Wood, Lime Washed Wood and Parisian Pine.

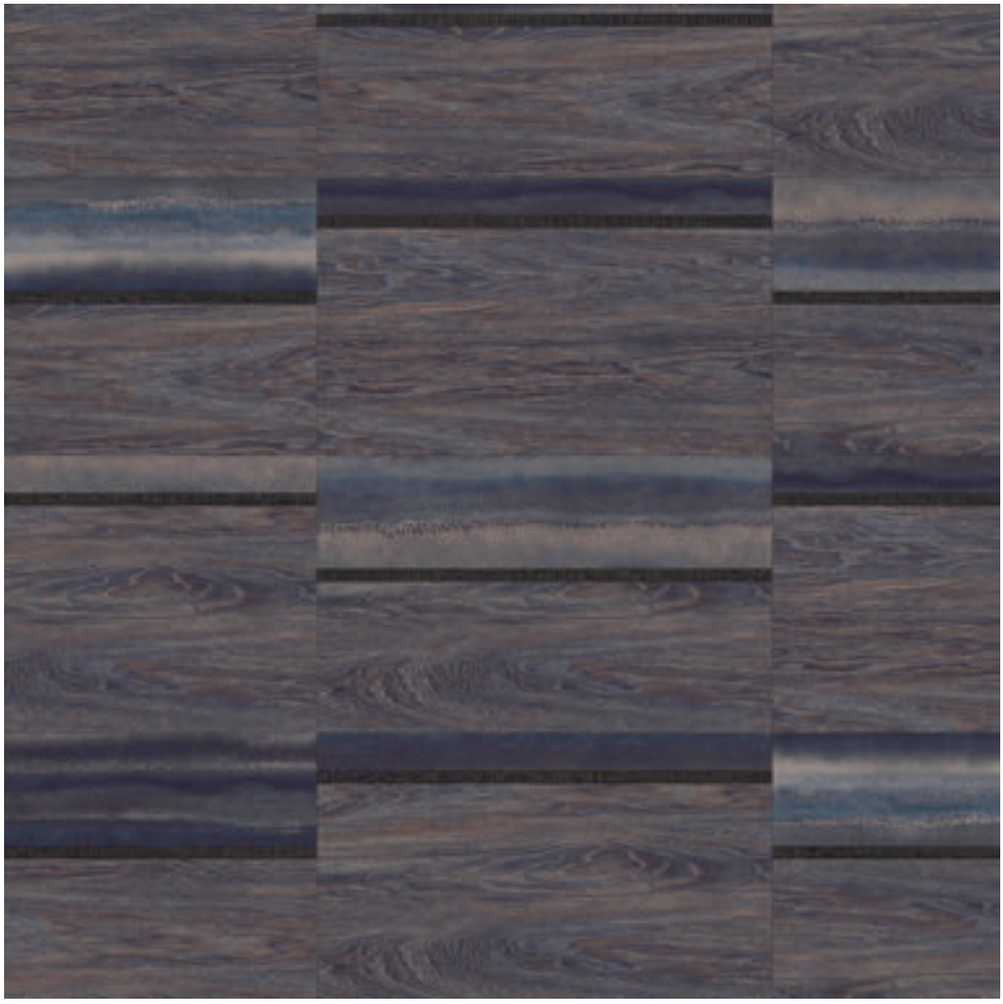
Above Moxon's Ezra Groskin and Sarah Emilie Vallee.

Above near right Vein: Pleat laying pattern with Galleon Oak, Cirrus Twilight, Parisian Pine, Shibori Lapsang and Metal Gold Leaf.

Above far right Aggregate: Kite laying pattern with Cirrus Twilight, Quill Gesso and Metal Gold Leaf.

Right Shale pattern visualised in use.

Runner-up TP Bennett



TP Bennett's Nature Trail collection was inspired by biophilia (love for nature) and the rising importance of well-being in the design of the workplace. In particular, the team's entry focused on people's emotional connections with plants and their softening presence in the workplace.

'We thought of the biophilia movement and how we live in cities but crave nature,' says associate director Emily Hume. 'The idea was for Nature Trail to be a canvas for flooring and plants to come together in harmony.'

TP Bennett took as its themes the elements that plants need to thrive – water, sun and air – and created deliberately neutral patterns for a more timeless flooring design.

For Water, the design team used the Varied Block laying pattern with prominent use of an oak timber whose grain seemed to it reminiscent of flowing water. This was combined with both a dark and a highlight paler blue which provided a 'cliff-face' element next to the river. Envisaged in combination with plants that thrive in dappled light and forests such as ferns and mosses, this pattern was proposed as suitable for a retail setting.

The Sun design has a far lighter, warmer feel and is conceived for an atrium, reception or café setting, teamed with succulents

Above left Water: Varied Block laying pattern with Chroma Blue, Galleon Oak and Cirrus Twilight.

Top Air: Pleat laying pattern with White Wash Wood, Umbra Veil and Infinity Spark.

Above Sun: Polygon Key laying pattern with Chalked Pine, Neutral Pine and Mica Mix Eggshell.

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Above left TP Bennett's Emily Hume and Ben Boxshall with their Nature Trail collection.

Above right Visualisation of Water pattern in use with luxuriant planting.

The idea was for Nature Trail to be a canvas for flooring and plants to come together in harmony

and cacti. Here, the aim was to capture the geometry of sunlight through the use of the Polygon Key laying pattern, which suggested to the designers the facettes of a prism, in combination with two pines and a pale, resin-like design.

Air is a more linear flowing pattern generated by the Pleat laying pattern of parallelograms. These are arranged in shades of grey to give the idea of movement and the pattern is intended as suitable for circulation routes such as shopping centres or an atrium. TP Bennett imagines this as the background for plants that suggest movement and thrive in open spaces such as grasses. ●

Runner-up Willmore Iles

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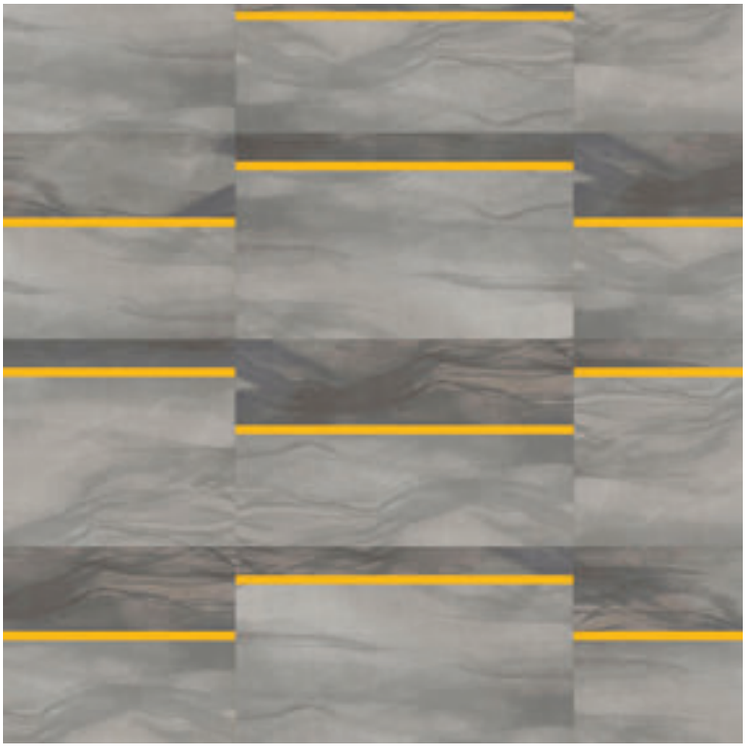
Left Robert Thorley, Simon Baker and David Crozier of Willmore Iles.

Right North Street: Varied Block laying pattern with Umbra Dusk, Umbra Veil and Napoli.

Below right Ashton Court: Pleat laying pattern, with Rio, Helsinki and White Wash Wood.

Far right top Queen's Square: Basket Weave laying pattern with Umbra Eclipse, Umbra Eclipse, Umbra Eclipse and Sevilla.

Far right below North Street design as visualised in use.



Willmore Iles' home city of Bristol was the key inspiration for the practice's interpretation of Amtico's collection. The practice aimed to reflect the contrasts within the urban grain and in particular the bright colours associated with the vibrant and creative character of the city.

After choosing a selection of laying patterns and colours, Willmore Iles came up with six patterns that could be associated with abstract interpretations of different areas of the city.

The three final designs are completely different in nature. The Varied Block laying pattern was used for a largely monochrome pattern in smoky colours interspersed with stepped highlights of thin yellow strips. Willmore Iles related this to North Street, which is south of the River Avon near the regenerated Tobacco Factory and home to an annual graffiti festival.

A Basket Weave laying pattern provided the structure for the Queen's Square pattern. Here, rather than use different colours for each tile, Willmore Iles used the same neutral

Our big aim was to have a fun project as opposed to something over-serious and commercial

background colour for everything except the punchy highlight of orange.

The third final design, Ashton Court, is named after the park across the Avon Gorge from the Clifton area of the city. This uses the five-colour Pleat laying pattern, with linear parallelograms in bright red and blue against a monochrome background. This can be interpreted as an abstraction of a 'leaves on the ground' concept, says the practice.

All three are imagined as applicable for large social spaces such as the communal areas of a student residence.

'Our big aim was to have a fun project as opposed to something over-serious and commercial,' says Willmore Iles architect Simon Baker.

Q&A Sarah Escott

Senior designer Sarah Escott is part of a 17-strong design team, which aims constantly to bring creative ideas and innovation to Amtico. Her focus is to develop laying patterns, including the Designer's Choice collection. We asked about their inspirations and how the team picks up on global trends in colour and pattern

How does Amtico go about finding inspiration for new laying patterns? Are trends self-evident or do you seek them out?
The way that we approach trends is driven by originality and innovation. We're all from different backgrounds in the design industry; weave, print, mixed media, automotive, illustration and more. In terms of inspirations we come at it from different angles. We do a lot of global travel to shows in Milan, Stockholm and the Far East, check out the cities and absorb the cultural aspects. We'll come back with photographs and interesting ideas and then share those insights with the group. We have trend books and online trend sources, but these are more general guidelines for the industry; we concentrate on our design research and develop concepts from that. Our products have longevity so we want to make sure we're not reacting to trends that have already manifested as designs take time to develop. Patterns we generate must last and not drop out of fashion quickly.

Do patterns and colour trends have the same shelf life or do they move at different paces to each other? How do you design your laying patterns to accommodate these changes?
It's a delicate balancing act. We need to cater for those who are going to use the product to the end of its warranty life and those using it for a commercial fit-out, which will have a far shorter life. With collections we try to create a large palette of textures and patterns. The beauty of this means users can combine elements of the palette. It has flexibility that can respond to changes in trends and empowers users to make their own choices.

As an international brand do you have to tailor patterns or colour combinations to different countries and cultures?
Aside from our research, we have colleagues across the world who send feedback on local trends. We're inspired by regional differences and they influence our global collections. What we look for are concerns that are common to all. Some parts of the globe prefer warmer, softer colours or textures so we might reflect that in our colour combinations. Some collections are tailored, say, more to Asia, and address cultural aspects in a more targeted way, but the main collection should cover the global requirement. That's why our palette is so broad: to address regional differences.

Architects are generally driven by a form follows function mantra. Do you aim to imitate natural materials directly or do you have other ways of how your Luxury Vinyl Tile (LVT) represents, say, stone or timber?
We know there is a beauty to natural materials and understand the appeal of them. At the same time we know through our creative process there is a truth to our products. Aside from the many technical advantages to using LVT over natural finishes, the nature of our material gives us the potential to do a lot more than just mimic timber or stone. With our capabilities and manufacturing processes we can enhance the natural to create colours and effects that are genuinely beautiful in their own right. We can recreate an oak for instance but can also treat it with washes to transform it into something that customers can't get anywhere else. Then, through Designers' Choice, we can cut these products up and combine them in new ways, giving them an entirely new scale or dimension, and challenging how they can be used in different spaces.

> We're inspired by regional differences and they influence our global collections. What we look for are concerns that are common to all

How are you constrained by manufacturing techniques? How do you see LVT design and production methods changing?
We don't see constraints or limitations. Each time we try a new process, we learn from that and apply the findings to our design thinking. We try to stay investigative and curious. We want to push our machinery to see what it can do and sometimes even harness the unpredictable. Our Umbra product is an example of our approach to innovation. We have pioneered the technology to create a non-repeating pattern with unique flow and movement, and an identity all of its own. The product itself represents significant advancements for LVT, and delivers original and beautiful designs to our customers. Combining that level of product design with the pattern cutting technology we have on site gives us and our customers extraordinary creative potential.

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Padiglione della Stampa
Milan Triennale, 1933

Luciano Baldessari (1896-1982) – set designer, architect and exhibition designer – is one of the lesser-known Italian rationalists of the 1930s. After studying architecture in Milan in the early 1920s, he lived for four years in Berlin – arguably the European centre of the artistic avant garde at the time. There he met, among others, Mies van der Rohe, Walter Gropius and Hans Poelzig, and produced sketches of theatre sets for the celebrated director Max Reinhardt. Back in Milan, Baldessari started working both as a set designer and as an architect. This photograph shows his Press Pavilion (Padiglione della Stampa) for the 5th Triennale in Milan, considered one of his best works. It consists of two contrasting volumes: one more solid and imposing, realised in brick, and the other light and transparent, made of steel and glass, and flanked by five free-standing columns – or 'chimneys' in the architect's intended reading. Exhibited as a project by Henry-Russell Hitchcock at MoMA in New York in 1936, the pavilion was unfortunately demolished at the end of the war. ●

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RIBA Journal
www.ribajournal.com
Published for the Royal Institute of British Architects by RIBA Enterprises Ltd
Registered office: The Old Post Office, St Nicholas Street, Newcastle upon Tyne NE1 1RH. Registered in England 978271

Printed by Acorn Web Offset Ltd in association with Logical Connections

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