

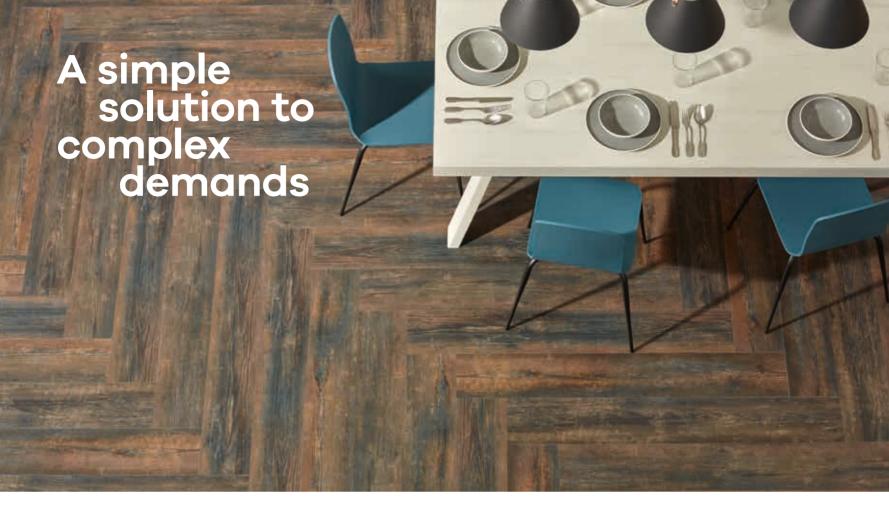
The RIBA Journal

£8.95/€16/US\$18

September 2017



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Could 'mini Amazons' supply London's drinking water? Stephen Cousins reports: ribaj.com/miniamazon



Stanton Williams' Musée des Beaux-Arts in Nantes, by Hufton & Crow





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1: Buildings

The passage of time has never been a place, but it should be; one of those long airy passages where cloister rather than corridor springs to mind, though in truth it is neither. Light flooding in from one side, a columnar rhythm emphasising perspective and time; aged stones dimly in the distance, Victorian tiles, sixties beams extending into focus and then a patchwork of scrape and reveal before the sharpness of white and more white. Refurbishment cannot solely reference original intentions, but nor should it disappear history. Working with the layers of time has been shown to make the richest of reworkings. You know that. •

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Peter Smithson
looped around the
Georgian buildings,
enlivened by the
extrapolated
topography
Eleanor Young sees
how Bath captivated
the brutalists:

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brutalistbath

Below The Grand Gallery at the National Gallery of Ireland, refurbished by Heneghan Peng. See page 8.



MARIE LOUISE HALPENNY

Don't stop there

The long neglected National Gallery of Ireland has reopened with subtle changes by Heneghan Peng. But important parts of the redevelopment masterplan are yet to be approved

Words: Shane O'Toole Photographs: Marie-Louise Halpenny

The National Gallery of Ireland occupies a dogleg site near the north-east corner of the most laden city block in Dublin. The block, which extends southwards from Trinity College to St Stephen's Green, is shaped like an hourglass, with Leinster House, the national parliament, at its centre. The west-facing front court of Leinster House is flanked by the National Library and National Museum, while Leinster Lawn, to the rear, overlooks Merrion Square and is framed by the gallery and its architectural twin, the Natural History Museum.

Designed by Captain Francis Fowke RE, the gallery opened in 1864, its exterior a mirror of the Natural History Museum, built on the south side of the lawn in 1857. Along narrow structure, it incorporated two large exhibition spaces – the Sculpture Hall (now the Shaw Room) on the ground floor and Queen's Gallery (now Grand Gallery) overhead – and, behind a bifurcated staircase, small galleries for cabinet pictures. Today it is known as the Dargan Wing.

The gallery quadrupled in size over the next century with the addition of Thomas Manly Deane's Milltown Wing in 1903 and the Beit Wing, designed by Frank du Berry of the Office of Public Works, in 1968. The form of each is an enfilade leading more or less to a dead end. Laid out in parallel, cross connections are made difficult by different floor levels.

Ireland's most popular free attraction was a decorated cave, a dark old maze, confusing and disorientating, even for those just taking a shortcut from Merrion Square to Clare Street around the corner. Visitors were always getting lost. Benson + Forsyth's Millennium Wing, built at right angles to the other wings in 2002, couldn't solve these problems, but it did provide a vital secondary entrance to the gallery, which meant it could still operate while the recent works were under way.

Serious problems were identified as long ago as 1988. Former director Raymond Keaveney says 'It was a tinderbox'. Decades of chronic neglect and temperature and humidity fluctuations were damaging the collection. Not until it was on the verge of closure did the government take action, finally acknowledging the need for a development masterplan to equip the gallery for the 21st century. After a call for proposals at the end of 2005, Heneghan Peng, and conservation consultant Blackwood Associates, were appointed in late 2006. The practice has completed major projects such as the University of Greenwich architecture building and the Palestinian Museum in Nablus, but there are far fewer in its home city.

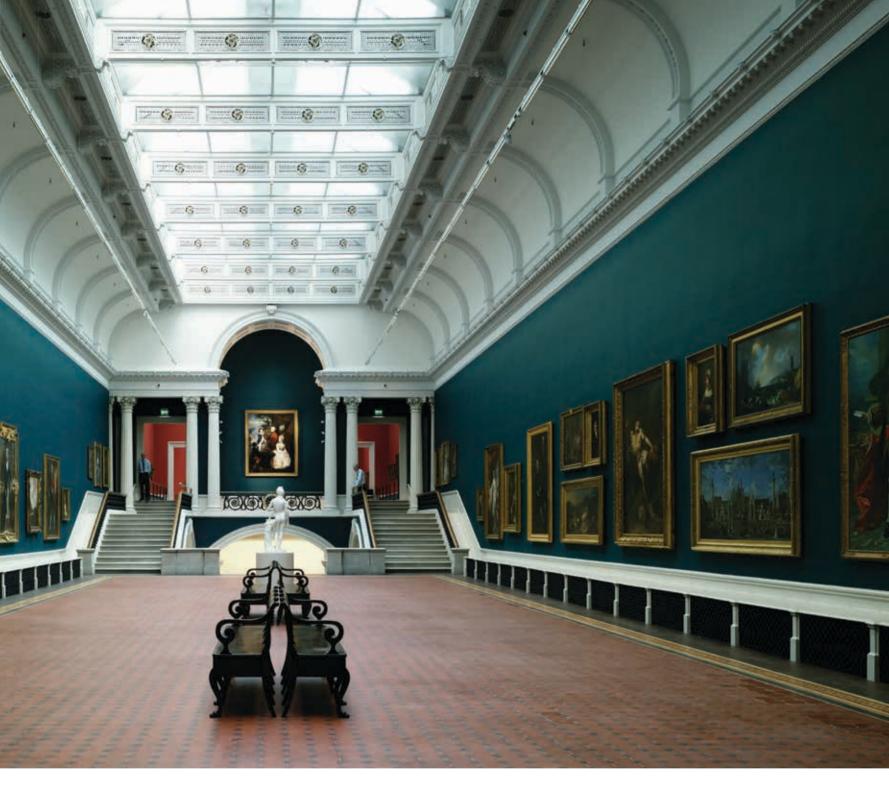
European benchmarking

The brief was to repair the building fabric and services, ensure acceptable ultraviolet light levels for exhibits, enable better art handling and storage, provide spaces for conservation and education as well as more hanging space, and open the largest art library in Ireland to the public. Proposals were benchmarked against other European institutions undergoing similar overhauls, including the Rijksmuseum in Amsterdam, Stockholm's National Museum and the Semper Galerie in Dresden.

The project almost died during the economic crisis in 2008, when the gallery's annual grant was slashed by 40%. Work limped on, thanks only to essential repairs for the roof of the Dargan Wing. The Dargan and Milltown Wings were finally forced to close in 2011 and more extensive works were approved the next year. Much of the refurbishment budget of over €25 million has been spent on necessary but largely invisible work. In a modern gallery 30% of the space is taken up by technical equipment. Here it couldn't go on the roof because the upper galleries are top lit,



Decades of chronic neglect and temperature and humidity fluctuations were damaging the collection





IN NUMBERS

€25m total cost

6,850m²
area (including energy centre)

€3,650 cost per m² (ex VAT)

The Merrion Square entrance to the gallery with ramped forecourt.

so the Merrion Square forecourt was dug out to install an energy centre 9m below ground. Indoors, most of the new technology has been concealed within existing spaces.

The changes are subtle but transformative. A gently ramped granite forecourt provides access for fire tenders and eliminates the old entrance steps. Inside, several delights had been hidden. Detective work uncovered a long-forgotten service yard between the two wings. Now brilliantly lit by a glass roof designed by Tom Gray of Paris-based T/E/S/S, the courtyard's white-tiled wall originally reflected side light into

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the Sculpture Gallery through windows that were blocked up generations ago to provide hanging space. Amazingly, the window frames were still in place. Fire engineer FLN recommended high-pressure deluge protection of the courtyard escape route from barely visible sprinkler heads outside each window.

'We pushed daylight a lot, to help with orientation and the visitors' experience,' says Roisin Heneghan. Calculations for gallery UV levels were annualised, permitting occasional levels higher than the recommended maximum of 200 lux. Fixed aluminium micro-louvres with a UV transmittance of less than 1%, set within the roof lights, deflect direct light without flattening it out. Partly inspired by the Rijksmuseum's example, the curators agreed to reduce hanging space to allow new windows in the octagonal ground floor galleries of the Milltown Wing.

The response to the reopening in June was rapturous. Although that ought to augur well for completion of the final phase of the redevelopment, it may, paradoxically, prove problematical. There is a popular impression that the gallery is back again for good after being closed for six years. But the major parts of the redevelopment - which would increase its floor area from 12,500m² to more than 19,000m2 with works in and on either side of the Beit Wing - have not yet been approved. If detailed design begins next year, completion should be by the end of 2023. Despite all the good press and an economy that is once more growing rapidly, the government may be inclined to sit back, as it has so often before. All that has really been finished to date are the stabilising and enabling works. The architecture of the National Gallery of the 21st century awaits us yet. One suspects the wait will be an anxious one.





Credits

Architect Heneghan Peng Architects

Conservation architect

Blackwood Associates Services & sustainability

Building Design

Partnership

Structure & civil PUNCH

Consulting Engineers

Quantity surveying AFCOM

Fire safety consultant

FLN Consulting Engineers

Facade engineer T/E/S/S

Atelier D'Ingénierie

Lighting design Bartenbach

Project supervisor

design process OLM

Consultancy

Winthrop

Project manager Office of Public Works

Main contractor John

Paul Construction

Mechanical contractor

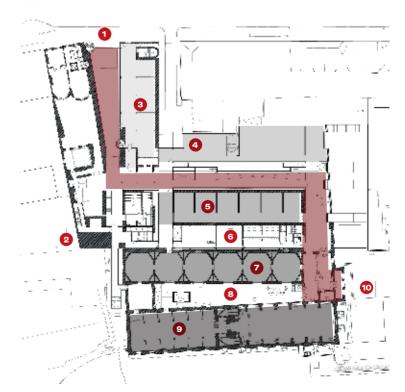
Electrical contractor

O'Kane Engineering Roof glazing Octatube International

Above A light-filled sculpture court under a glass roof transforms this old service yard.

Below left Entrance hall.



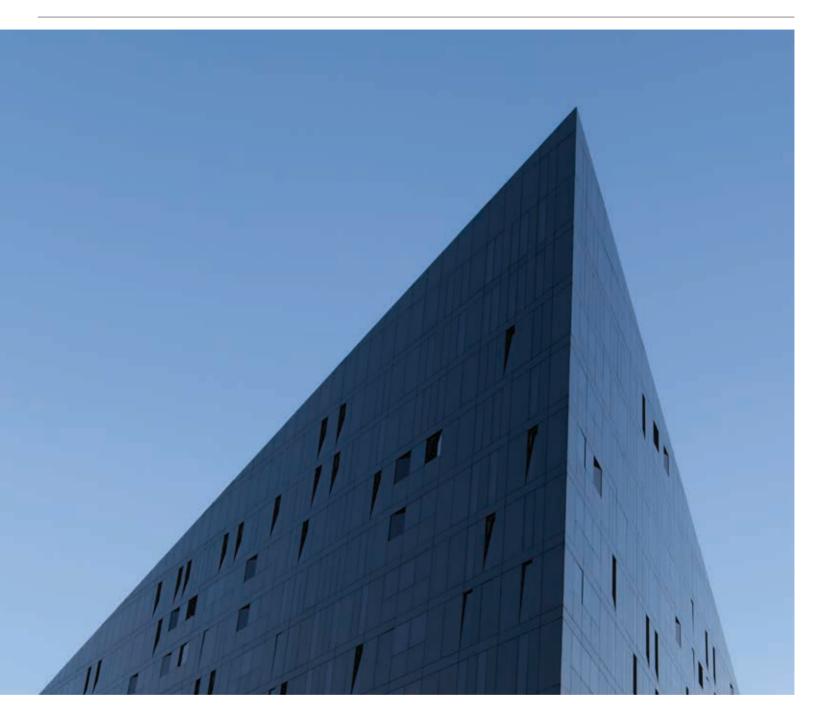


- Clare Street entrance
- Art entrance
- Millennium Wing 3
- 4 New galleries
- 5 Beit Wing
- 6 Conservation 7 Milltown Wing
- Courtyard (previously the
- service vard)
- Dargan Wing
- 10 Merrion Square entrance









Mann Island, Liverpool Broadway Malyan

Photograph Paul Karalius Words Jan-Carlos Kucharek

Perhaps it's because Paul Karalius studied textile design that he is so prepossessed with geometry. Post-graduation, he spent four years in Hong Kong as a graphic designer for a fashion brand before stumbling into a gallery whose show on new urban photography opened his eyes to the career change he'd always hankered after. 'I bought the catalogue, took it to

a shop and told them I wanted the camera that would let me take these photos,' Karalius says. 'They capitalised on my naïvety – I spent a lot on my first Nikon and a few lenses.'

The Liverpool he visited on his return felt similarly enriched, he recalls. Not perhaps in its height, but in its new architecture's seamless glassiness, its futuristic ambition and its brazen clashing of new with old, he saw analogies with the Asian Tiger he'd just left.

But he admits a wide-eyed naïvety in his photograph of Mann Island's black wedges too; something he attributes to the fashion career he left – one absorbed by the power of the graphic or logo. But it's one that, for nostalgia's sake, remains in his portfolio. He admits it may be superficial, but with fashion you are always seeking the killer visual; for images that can be abstracted to create the enduring graphic form, the swoosh of Nike. And anyway, architects too seek to be branded by their photographers; to have their bad made good and the good better, he concludes. 'They demand that we show their work in its best light – and there's quite a gap between documentation and advertising.' •





The project effuses that energising feeling architecture sometimes can



The RIBA Journal September 2017 ribaj.com



Above To simplify the build and keep costs down, work sheds have no plumbing or heating. The upside of that is that tenants leave their studios more often, getting to know each other and creating a community more quickly. Left The scheme is temporarily located on the site of a former council car park, incorporating a 1980s council office building.

Breath of fresh air — on a budget

It's not just Blue House Yard's jaunty colours and seaside aesthetic that enliven a grimy part of London. It shelters local start-ups at affordable rents too

Words: Isabelle Priest Photographs: Joakim Boren

Weatherboard and timber boarding has become ubiquitous in the UK over recent years. We've seen it at the Ditchling Museum (2013), Carrowbreck Meadows housing in Norfolk (2016) and now, refurbished, on 2017's Stirling Prize shortlist with Baynes and Mitchell's Command of the Oceans in Chatham. It's associated with unshowy beachside locations and quaint village landscapes. So where might this higgledy collection of colourful new fishermen's huts be? Whitstable? Southwold? Teesmouth at a push?

No, you're looking at Wood Green, zone 3, north London – 100m down the throat-clogging road from the tube station. The site is an old car park penned in by a blackened bus garage and tall, bad 1980s mirrored window commercial buildings (which, Haringey Council please note, would benefit from selective renewal by the right architect rather than being totally demolished for those town centre regeneration schemes you're plotting).

Hence these buildings are actually not fishy at all. They are a huddle of workplaces and studios offered at 80% of market rates, and part of the council's 'Meanwhile Campus' project to prevent creative industries based in this unlikely spot from being driven out by big developments under way nearby – most notably The Workspace Group's overhaul of the Chocolate Factory. The idea began with SODA's conversion of the 1935 North Metropolitan Power and Electricity

Company's offices and showrooms into a hotel for artists called Green Room Hotel and will continue with the co-working space Wood Green Works – all over the un-green road from here.

Designed by Islington-based Jan Kattein Architects, Blue House Yard is as much of a surprise on a rainy day as a sunny one. The project effuses that energising feeling that architecture sometimes can. It is a temporary scheme, intended to last five years, and began just last summer. In 11 months, it was tendered, designed, funded, got through planning and was constructed – by more than 100 volunteers.

'Originally Makeshift [of Pop Brixton heritage] were on board,' explains Kattein, 'but they couldn't make it work financially because initially the council didn't include the existing [former council office] building. The project then went back out to tender in August 2016 for a handful of selected firms to come up with a new plan.'

On winning, the architect's first move was to paint the nondescript 1980s brick office building bright blue, roof and all, to create an identity – and a name – for the project from the outset. It also set up an operating and contracting company called High Street Works with community interest company Meanwhile Space because as part of the competition deal, the designer had to act as the operator, do the delivery and get the grants.



High Street Works received grants totalling £184,000 from the GLA and Haringey Council and borrowed a further £50,000 to make the budget work, meaning it has taken on a significant part of the financial risk if it fails.

'That's what unlocked this project,' says Kattein. 'The budget was very tight. It works out at £700 per metre squared – you couldn't even build a garage for that.'

Yet for this tiny budget, High Street Works has achieved an enormous amount. It has converted the 300m² office building into 13 studios with communal kitchens, WCs and a bright white and blue interior, and constructed the nine new worksheds in the car park around a much-needed local space for pop-up market stalls and events. The bright paint and distinctly un-urban forms create a buzzy atmosphere that must pique the interest of passers-by. This is helped by the fact that visitors can wander through the site at any time of day, unobstructed by the kind of fences or fortress architecture at similar schemes. The 24-hour taxi office shown in the original drawings, which is still under construction, promises to animate the site



Above Street markets are held in the yard Wednesday to Friday during the day and on Saturday nights.

Top Animated axonometric drawing of the original design; the bus café and taxi office are still under construction.

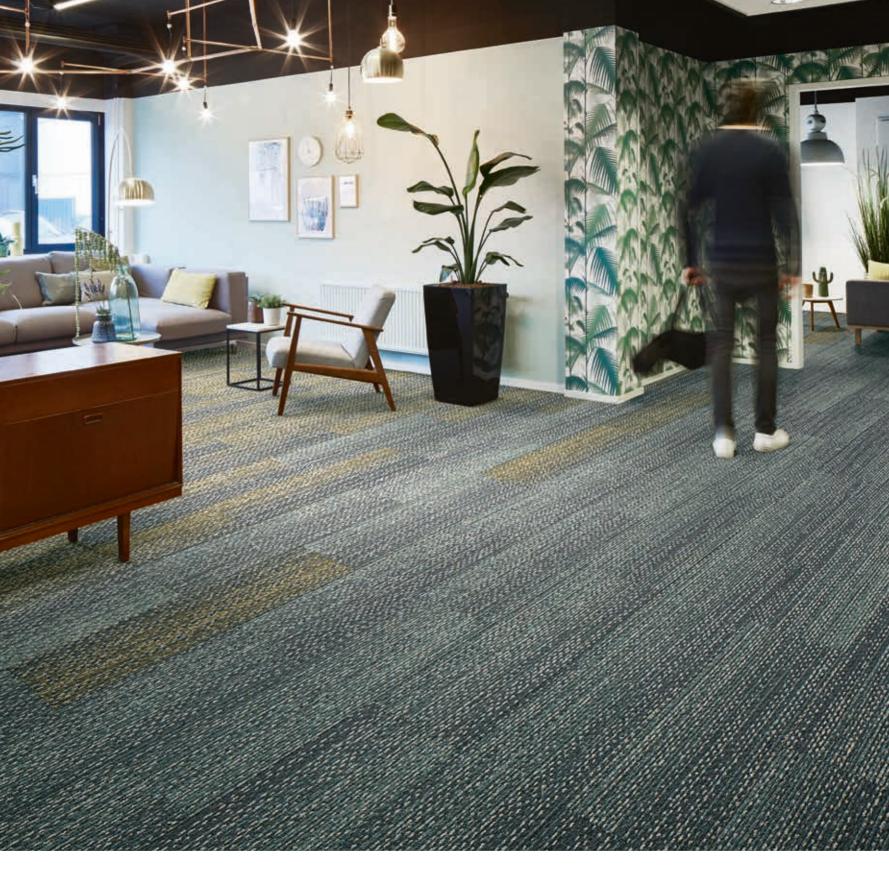
Credits

Architect Jan Kattein Architects

Client Haringey Council

Operator and contractor

High Street Works









3300 Watercolour, 3301 Fresco



Above Tenants are encouraged to personalise their studios. Here an art gallery has painted the walls purple and put in a sand floor.

even more, as well as provide security for the long-term.

The process of Blue House Yard's construction is as surprising as its eclectic selection of tenants. Given the budget, the entire project was designed for self-build, constructed on site by waves of volunteers recruited via social media and word of mouth. The sheds are small, replicable and relatively simple to build: timber frame clad in weatherboarding and roofed with corrugated sheeting. Tenants are encouraged to customise the basic chipboard interiors themselves, which many have in various eclectic styles.

High Street Works provided a project manager and site manager as well as a group of eight apprentices from a local college, but otherwise volunteers were put into small groups each led by a professional carpenter so they would learn new skills. Timber was sourced from the local builders merchant, feeding into the local economy, while the high-spec windows were donated by Velfac

after one of its orders was cancelled, saving them from the scrapheap.

So far, Blue House Yard has been a success and may even turn a small profit by the end of the programme. Its quirky look has already attracted fashion shoots and a promotional video for Subway (perhaps not an association everyone had hoped for). And, despite only opening at the end of June, by the end of July all bar two of the studios were let (the orange hut might still available if you're interested).

What's more, the scheme has revealed a fascinating community of artisans, entrepreneurs and creatives that otherwise might have remained hidden in larger, closed office buildings or not had the confidence to scale up from kitchen-based hobbyists to proper small businesses. There's a ceramicist, lingerie designer, bag maker, modern stationer and coppice worker/greenwood craftsman. One of the studios has been converted into a recording studio, another into a film editing suite. One hut is a vintage clothing shop, another is an art gallery.

Consequently, Kattein is hopeful that the project will outlive its planned five-year life at Wood Green, stretching to perhaps seven. But if not he'll pack up and move it elsewhere – he's made that possible. •

Below

The interior of the Blue House contains 13 additional studios of various sizes.

Below middle

All manner of small businesses have moved into the project, including a ceramicist, lingerie designer, bag maker, bespoke stationer, and coppice and greenwood craftsman.

Below bottom

Mark + Fold, a new stationery company, has converted one of the sheds into its first shop downstairs and its head office upstairs.









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First Impressions

Stanton Williams made a great start with Nantes' Musée des Beaux-Arts, but once you get past the foyer the refurbishment displays little clarity or courage

Words: Isabelle Priest Photographs: Hufton & Crow

Below Model showing the complex arrangement of buildings on the block making up the museum. Arriving in Nantes from the airport by car along the Boulevard de Vendée is an underwhelming experience. It's a main route of more or less straight 6km road that crosses the Île de Nantes, passing a few interesting contemporary office buildings and many less interesting 1960s residential blocks. The road eventually leads to the city's medieval castle where the dukes of Brittany lived from the 13th to 16th centuries, when Nantes was the regional capital. The Musée des Beaux-Arts is tucked away in a narrow side street on the other side of the road.

On first appearances it seems that's your lot – a slightly impotent castle that has lost much of its commanding stature by being cut off from the river and substantially





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encircled by modern highways; a semi civic and cultural district around the botanical gardens; and a monstrous new development area. But of course it's not – though I did have to spend 24 hours in the city to realise it.

Beyond the castle, and the pleasant quarter-circle ring of cobbled streets, medieval houses and the un-thriving Cours St-Pierre park at its end, there's a vast centre-ville of 18th and 19th century white stone buildings that unravel along a rolling topography of Haussmann-esque avenues, boulevards and streets offering a perfect combination of grandness and intimacy. There are open piazzas and kilometres-long malls and vistas. The area is packed with boutiques, restaurants and people, and is made incredibly civilised by being mostly pedestrianised.

Of course few cities are designed around driving in from the airport. But that experience of Nantes can be seen as a macro version for Stanton Williams' seven-year refurbishment of the city's Musée des Beaux-Arts, a fine typical Beaux-Arts stone building designed by Clément-Marie Josso in 1893. It too gives the impression that what you see is what you get. It too is made slightly impotent by the streets around it, but in this case because they are too narrow and always have been.

Stanton Williams won the job in 2009. What the architect found was a rather shut up, introverted museum that was struggling to display the breadth of its 8,000 piece collection – everything from the old masters to contemporary work. The architect's task was to open up the museum and add new gallery space and facilities, including teaching spaces, an auditorium, a restaurant and storage, deserving of the fifth largest museum in France and a Musée de France holding part of the national collection for the Louvre. It was here that Anish Kapoor's Svayambh red wax and paint installation was shown – in 2007, before the Royal Academy – and where the most iconic photographs of the project moving through grand ornamental arches were taken.

Located at the end of a city block and trapped by the small roads, the museum had acquired over the years several pieces of neighbouring property; a former 17th century chapel, a low-rise townhouse and a car repair garage. In addition to making way for new facilities, the most complex aspect of the brief was to bring together these components into a coherent experience around a block of flats and its enormous walled garden – which would remain private.

To do so, Stanton Williams, led by director Patrick Richard, took the most obvious moves. Beneath the square footprint of the original museum, former garage and townhouse, it excavated a 6m-deep basement. This increased space, positioned the visitor cloakrooms, WCs, store and education rooms, and created a circulation floor that spanned and connected the site. Then the architect set about filling in the acquired buildings with new ones – the 'cube', a 4000m², four



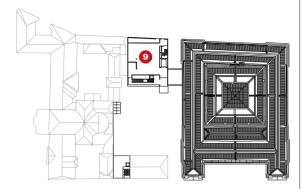
Above The administration and archive building on Rue Georges
Clemenceau, along the street from the main entrance.



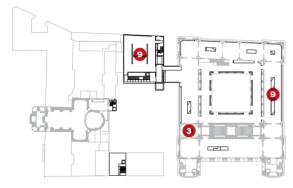
Right The new 'cube' containing contemporary art to the rear of the original building is accessed by the bridge at the first floor, or via passages underground. The gated road is primarily a service road, although is open during the day to pedestrians crossing the block.

Buildings Museum

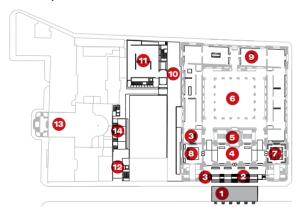
Second floor plan



First floor plan



Ground floor plan



Basement plan



- 1 New street paving
- 2 Auditorium steps
- 3 Lift
- 4 Entrance fover
- 5 Grand double stair
- 6 Patio
- 7 Shop
- 8 Restaurant
- 9 Galleries
- 10 Gated street
- 11 The cube contemporary art building
- 12 Administration and archive townhouse
- 13 Chapel now used as gallery space
- 14 Outdoor sculpture court
- 15 Education rooms
- 16 Auditorium
- 17 Artwork storage

Below The basement has been excavated from between the foundations of the original building and made into a habitable space using concrete, oak and bronze.

storey gallery for the museum's contemporary art collection to the north-west of the original building, a new four storey administration and archive terraced building along Rue Georges Clemenceau to the west of the main entrance, and a pavilion behind the chapel, designed by conservation architect Pierluigi Pericolo.

The original museum building is also connected to the cube by a first floor bridge. This link opens off one of the existing museum's largest galleries, continuing over a gated service road that divides the old and new parts of the site, and straight into one of the new contemporary art galleries. In an unusual move, the bridge is completely opaque, and acts as 9.3m-wide exhibition area.

Undoubtedly, the most successful part of the scheme is what Stanton Williams has done with the main entrance and front elevation. It has removed the metal gates and railings that went between the two wings of the front elevation and replaced them with stepped outdoor auditorium seating, book-ended by discreet glass pavilions. One of these contains the lift, the other will be used to display artworks in the manner of Trafalgar Square's Fourth Plinth. In addition to improvements in accessibility, Stanton Williams has further brought the presence of the museum into the street by designing coloured geometric paving that spills onto the road, making it feel more like a public square. It is now an area to enjoy lingering outside, as many of the pupils at the lycée opposite do in their lunch hour. The newly cleaned Nantes white stone helps the building glisten.

This considered approach to the entrance and visitor













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IN NUMBERS

€48.8 total cost

2009 architect appointed

architect appointed

2014 start on site

4,000m²

13,000m² renovated area

Left One of the now unpanelled galleries before artwork was hung. In the centre is one of Stanton Williams' new panels for more artwork.

Below Previous ornamental metalwork and a mosaic pattern in the patio floor have been removed in the latest renovation to make it as minimalist as possible.



arrival continues inside. In the main hall, which was already a beautiful stone vaulted space, the architect has inserted a new floor of matching stone from Portugal, that gently ramps in places to overcome small flights of steps that had previously caused accessibility issues. The restaurant is located in a wing to the west of this hall, the shop on the opposite side. The newly-excavated basement, with its palette of bronze, concrete and oak, has been slotted in between the original stone foundations of the 19th century building, exposing them for the first time in all their glory. It feels appropriately weighty and spacious at the same time.

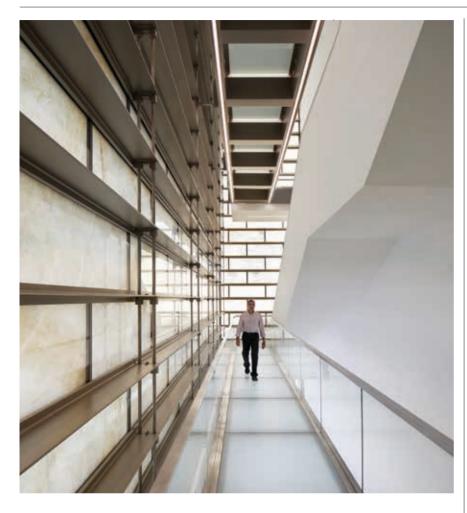
It is difficult, however, to see the rest of the building and its complex arrangement of parts in such a positive light – even the new feature marble wall to the cube, which the architect is so proud of.

The thing is, the original Musée des Beaux-Arts is in itself a magnificent building. Buildings like this are never two-a-penny, even in France. Its symmetrical beauty, rusticated at the base and dripping with fruit and statues on the outside, and what's left of the original design inside, are fabulous, including the phenomenal pair of staircases that ascend in opposite directions behind the great hall. Yet, as at the castle, its redevelopment beyond the entrance seems to treat it as an insignificant building. Only certain rooms are listed, so Stanton Williams could do mostly what it liked, and it has.

As a result, the natural flow and character of the original building has been stripped out. After such a splendid and promising entrance Stanton Williams' renovation lacks fun, and leaves one feeling how incredibly tiresome and uncompromising the principles of contemporary architecture can be; even at those projects with \leqslant 48.8 million to spend.

Why? Because the renovation has adopted the white walls museum formula as dogma, ripping out nearly all the original panelling in the upper galleries in favour of shadow gap skirting; replacing smaller paned skylights with far larger sheets that do not resonate with the proportions of the historical spaces; and then painted everything white, regardless of what was already there, or what lay behind previous renovations (perhaps there could have been an opportunity to scrape back the 1960s paint in the patio to reveal the impressive trompe l'oeil designs visible in earlier photographs). The several

Stanton Williams has not listened to the building, but rather tried to trick it into being a different museum from the one it is





Above Daylight passing through the marble wall creates decorative shadows during the day in the cube's stairwell.

Left One of the new galleries in the cube.

Architect Stanton Williams Architects Client Ville de Nantes and Nantes Métropole Contractor Bouygues Bâtiment Grand Ouest Cost consultant Artelia Structural & envelope engineer RFR & Sepia Services engineer Max Fordham & GEFI Fire safety Casso & Associés Signage/graphics Cartlidge Levene Approved inspector & CDM co-ordinator OPC E2CT

painted feature walls only serve to demonstrate that the architect lacked courage in this museum setting.

The justification is that the architect wanted the curation of the artwork to follow its chronology, with old masters on the ground floor, modern art on the first floor and contemporary art in the cube. In doing so, Stanton Williams has not listened to the building, but rather tried to trick it into being a different museum from the one it is and should be. The ground floor of the original building was, says Richard, designed and used until the 1990s as the city library. The spaces are lower, less welllit and not designed to accommodate large works of, for example, religious art. The first floor spaces, on the other hand, are. Likewise, those still partially historical spaces are being used to display often much smaller works of modern art. What's more, to accommodate as much art work as possible, Stanton Williams has replaced intriguing high-back early 20th century gallery benches with over-sized and under-designed minimalist exhibition panels in the centre of nearly all rooms, which are overbearing and complicate the circulation.

The new gallery infill building to the rear does not provide great standalone spaces either. Columns interrupt the galleries, a weird half wall separates the window to the street that is supposed to act like a shopfront, and toilets come randomly directly off the galleries on each floor. Neither does the tight stairwell feel deserving of its opulent translucent marble wall.

On top of these issues, the building lacks a space to respire, not helped by an overenthusiastic director and Susanna Fritscher's current installation in the central atrium/patio which fills the space and prevents free movement. The initial hanging is also so dense that every other painting could be removed and it would still feel busy. Stanton Williams is not responsible for the hanging, but every spare space has been put to use for artwork, adding walls around the upper patio gallery where perhaps they should have been taken away.

This adds to the problems of circulation in the building. As the museum is fee-paying, it has only one entrance. The original library entrance to the rear has been closed off to the public, potential entrances in the new buildings have not been opened. The circulation is confusing, with no quick access around the site. To get to the ground floor of the cube from the main entrance, for example, visitors have to either go up or down one level, then down or up again. What's missing is a flow of people through the site and a big public space to pause. Downstairs and outside the four buildings are connected by narrow passageways. Arguably the cube shouldn't be there at all. The patio could have been that large public court accessible both from the main entrance as well as the former library entrance.

Unlike the city of Nantes itself, after an impressive imposing start, the Musée des Beaux-Arts has a disappointing, confusing finish. •

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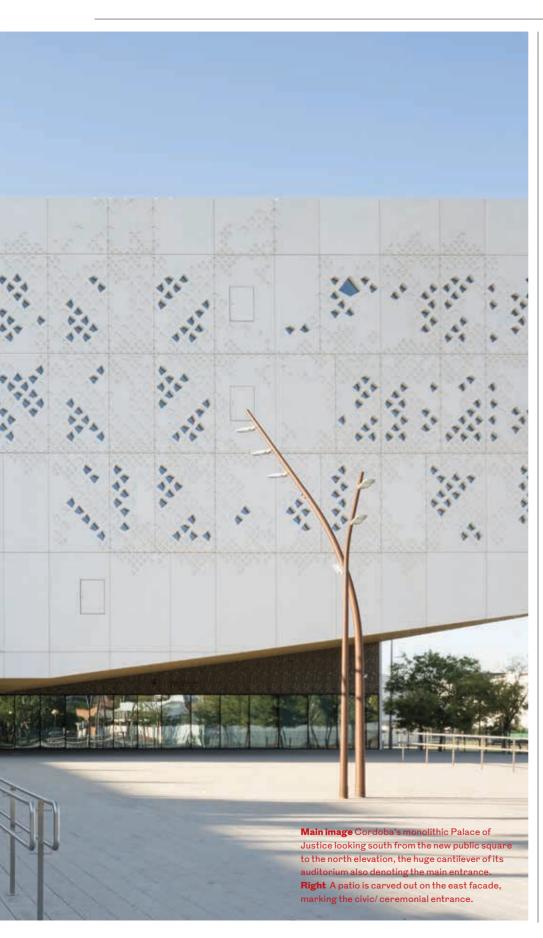
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Despite traditional Moorish references, Mecanoo's monolithic Palace of Justice expresses the full force of law to Cordoba

Words: Jan-Carlos Kucharek Photographs: Fernando Alda

During fiesta time in Spain, while some places busy themselves throwing overripe tomatoes at each other, building precarious human pyramids or generally setting things on fire, old Cordoba conducts itself with rare decorum. May sees the city's private patio courtyards, mostly hidden from public view by wooden doors or iron gates, opened to all, allowing residents enjoyment of their flowers, scents, fountains and painted ceramic walls. The sheer number of patios in evidence here hearkens back to Roman roots, and a domestic urban typology continued by the Moors when, from the 8th century, they set about turning the city into a glorious independent Caliphate on their empire's western edge. The communal houses built around interior courtyards - the 'casa-patios' - were a very Cordoban form, their size predicated on allowing cooling breeze to circulate while keeping out the harsh Andalusian sunshine.



With varying spatial demands, this building programmatically has the sense of having to function as a small city-state

A few hundred years on, and it looks like they're enjoying a comeback, now part of a much larger civic intervention by Dutch firm Mecanoo, which in 2006 won an international competition to design the city's new $48,000 \, \mathrm{m}^2$ Palace of Justice in the Parque Figueroa suburb, part of Cordoba's north west expansion. But the patios loom larger than life here with a design that hews them out of what seems, from the streets around it, a gigantic, monolithic block of white stone.

And just as the wheels of justice turn slow but exceedingly fine, associate partner Nuno Fontarra explains that it took 12 years for the €43 million courthouse project to go from win to completion. Four years of design development preceded the project being 'locked' in the 2010 recession, to be resuscitated in 2014 with a new contractor. Three more years has seen courtrooms and administrative offices rise from behind its white GRC diamond-perforated panels. This includes a huge 10m double basement with a legal archive, holding cells, lab and mortuary, interview rooms, plant and parking areas for police and



Above Looking east from a distance, the city-block scale of the Palace of Justice is plainly evident.

ambulances. With the varying spatial demands for the accused and victim, the prisoner and the free, and those who represent, analyse, judge and incarcerate them – this building programmatically has the sense of having to function as a small city-state. Fontarra is keen to emphasise this complexity but he concedes that over the course of those 11 years, there are aspects to the design where Mecanoo both won and lost its case.

But this is certainly not true, he contends, in the main moves, which would have been the same if the firm was designing it now; like the idea to create a super-dense block that covered two thirds of the site and then carve into it with semi-private courtyards. Or the concept of the big ramp leading from the main entrance at the northern third down to a new public square to connect with the Figueroa gardens beyond – a move that he thinks won it the competition in the first place. But formally, for Mecanoo, it was about creating an expression of solidity, to be in total control of the ingress of light, with walls of tiny geometric openings referencing the city's Moorish architecture. Internally,

Section A-A: central spine area



Section B-B through patios



- 1 Main entrance
- 2 Circulation spine
- 3 Courtrooms
- 4 Archive
- 5 Auditorium
- 6 Juvenile court and prosecution
- 7 Enforcement services
- 8 Prosecution
- 9 Penaljurisdiction
- 10 Provincial court
- 11 Patios
- 12 Registrar entrance/
- 13 Staff circulation areas
- 14 Public square

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IN NUMBERS

48,000m² total area

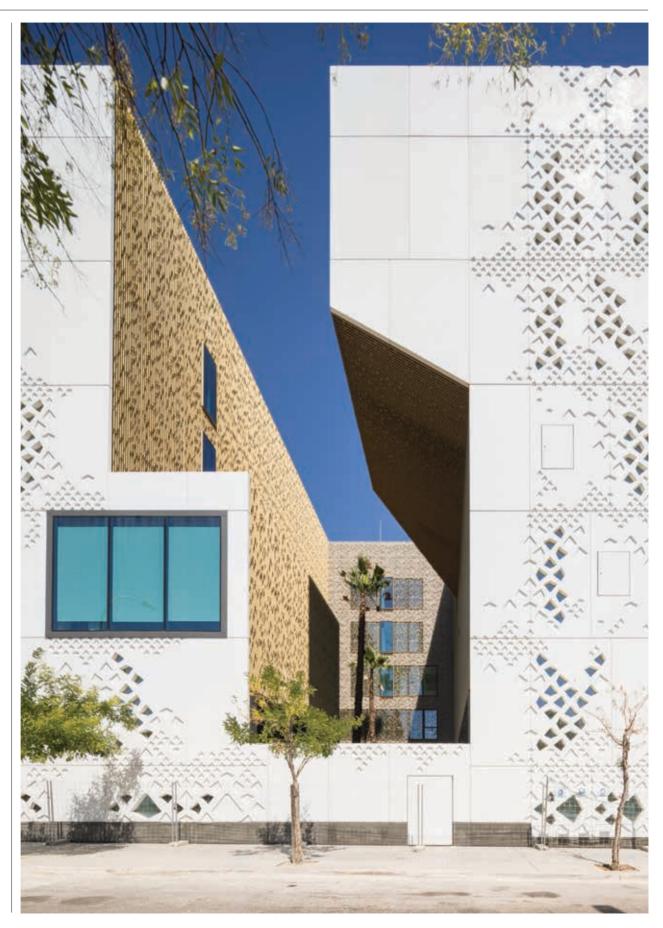
> €43m total cost

> > 26

courtrooms

forensic institute

10 patios



Right Gold anodised aluminium latticework covers the surfaces that have been exposed in the carving out of the massive GRC facade.

Cordoba Palace of Justice



as much as possible, it was about having a wide spine of public circulation, from which people would be filtered into increasingly private judiciary spaces. It's a very bespoke design,' Fontarra tells me. 'Specific to this city and its particular civic function.'

This may be so, referencing the city's past on a conceptual level and perhaps in terms of logistical layout; but I wonder, the new north square excepted, how much it applies to its locality. While the quality of the external walls of cast white GRC only increased in the years the project was on hold, moving from an innovative process to a high quality, standardised one, the result is the same in terms of the elevation; Mecanoo's desire for a 'hermetic structure that communicates with the street' might be wishful thinking.

Yes, the building's three ramped entrances do allude to a programmatic complexity at play, with the public north entrance demarcated by its huge cantilever and accented elevation. At the south end, access to the family and children's court and forensic institute goes from pavement level to a small, raised, discrete entrance leading to a hidden patio. At the east, civic registrar and events are reached via ground level, opening out into a full-height, day-lit patio before leading couples into the building proper. While the entrance function might be the same, these amount along with a more foreboding, Dante-esque slope down on the west side to forensic labs, mortuary and holding cells - to a subtle and rarefied expression of their fundamental difference.

Mecanoo's desire for a 'hermetic structure that communicates with the street' might be wishful thinking

Basement plan



Ground floor plan



First floor plan



Third floor plan

1 Archive

2 Forensic institute

3 Café and patio area

4 Staff circulation areas

5 Ramp to parking zone Entrance to juvenile/

> Main entrance Public circulation

12 Night court

14 Auditorium 15 Enforcement services 16 Staff offices

17 Provincial court 18 Penal jurisdiction

19 Social jurisdiction

20 Prosecution

13 Admin

domestic violence court

Registrar entrance/ wedding room 10 Juvenile court and prosecution 11 Courtrooms











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But the desire by the local government to maintain separation from the street, together with Mecanoo's own disregard of the low quality of the existing suburb, results in an uncompromising, if imposing, facade. Apart from the ramps to the raised internal public spine, the building yields little if anything to the street. This is despite the facade modulation in its 33 GRC panel arrangements and cantilevers into the upper patios (the latter generating repeating anvil-like forms around the building).

And apart from where they denote an entrance, the patios reinforce this. They also fell victim to value engineering and vacillation on the part of the client over the internal configuration of offices. In the days $before\ City\ Hall\ finally\ decided\ on\ cellularised\ of fices$ and the notion that light to feed them could come from elsewhere, the patios were covered in solid painted ceramic, but as the need to provide individual windows manifested, so did the idea of a stainless screen curtain that would homogenise their internal faces. This was value-engineered down to a gold-anodised aluminium lattice that tracks along soffits as well as down walls. With the patios all starting above eye level, the overall effect is of mass and solidity; the intractability of law rather than transparency. Perhaps that's the look they were going for.

Internally, justice presents itself to the public with a more sympathetic face. The circulation spine that runs north south along the building, unifying in section courtrooms with admin offices, judges chambers, auditorium, and child courts and the forensics institute in the south blocks, is cut with holes as it rises, deep funnels bringing the play of light and shadow into its white-walled volume. And suddenly the point of the patios becomes clear, acting as spatial dividers between the various blocks of civic, judicial, administrative and institutional functions, pulling light into the social heart of the building. Apart from the basement café patio however, they remain inaccessible to the public; upper level patios only open to office staff and the judiciary.

But, as I said, inaccessibility is an enduring theme here, as programmatically the building is designed to ensure division is maintained between different users. Public galleries to courtrooms might be accessed from the spine but once through the door, a world of separation awaits; public waiting areas for victims and defendents' families are divided; the accused,

Left The patios of the east elevation break up the solidity of the GRC facade.

Below The anodised aluminium curtain homogenises the punctured elevations of the patios.









THE ART OF HEATING

Cordoba Palace of Justice

Right High level light funnels control the harsh Andalusian sunlight to let it filter into the central spine.

Critique

Below right Public access to the building goes no further than the first floor auditorium and court rooms; above ground, the patios remain accessible only to workers and the judiciary.

brought up by lift from below, are allocated a waiting zone that never crosses the path of either the public or judges, who also share this back of house area. Thus the seriously oak-lined, formal volumes of the courtrooms themselves are cossetted in a labyrinth of serving spaces.

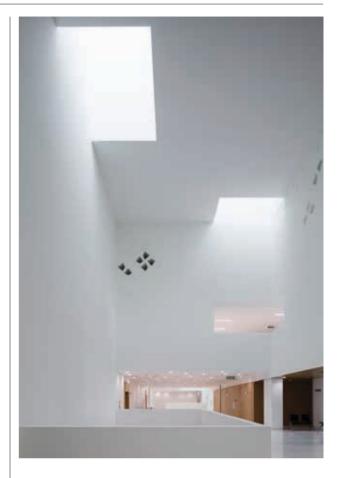
Similarly, the children's court and forensics institute, which will try and identify cases of physical and sexual abuse, have Chinese walls between them and the public spine. The apparent openness of the section is also a conceit; it might promise a Hieronymous Boschlike ascent to the heavens through a light funnel, but the public will never get further than the auditorium level, its stepped section resulting in the massive steel cantilever of the north entrance. Tucked away in the north west block, its first floor lobby deserves marking with some hanging artwork if there's ever a budget for it.

Wandering around looking at the general high level of cladding quality and internal finish I have to pinch myself to recall that the whole lot was procured for barely €1,000/m² build cost. Everything's cheaper in southern Spain muses Fontara; not just fags and beer, but the architect's fee, no extra consultants and subcontractor 'copycat' approaches to almost everything that's specified. There's no expensive facade access systems on this behemoth – it's a cherry picker, two men and few sweaty afternoons.

Similarly, in an interesting contractual quirk, at pre-tender stage, Mecanoo specified the most expensive toilet pans it could – stainless steel throughout – with a view to downgrading them to ceramic as costs were cut. But with the contractor later tied in to a fixed price contract, he could only increase, not downgrade the spec. So it transpires that in their rather handsome, spacious, public and office bathrooms, the same, robust, impact resistant high-grade steel pans were installed in cubicles as those on display beyond the steel bars in the prisoner holding cells.

Fontarra seems embarrassed by this oversight; I see it as an aspirational reminder that all should be subject to democratic justice. Oliver Twist's pompous Mr Beadle would feel vindicated; in this detail at least, the law really is an ass.

It might promise a Hieronymous Bosch-like ascent to the heavens through a light funnel, but the public will never get further than the auditorium level





Design team Mecanoo Architecten and Ayesa Client Consejería de Justicia e Interior Junta de Andalucía PPP developer Cijucosa Structural engineer; Mechanical and electrical engineer; Fire safety, sustainability, lighting, acoustics; and Roofs and facade consultant Ayesa Seville Contractor Ute Isolux Corsán-Copcisa, Madrid

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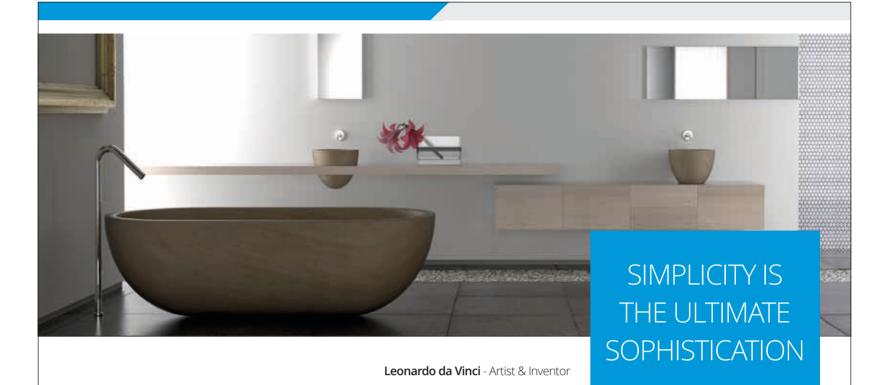
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Modernism joins the preservation club

St Fagans near Cardiff is a museum of actual buildings, its own fabric neglected while preserving others. Purcell has changed all that

Words: Eleanor Young Photographs: Phil Boorman

St Fagans National Museum of History is an eclectic collection of Welsh buildings, each transplanted to this site just west of Cardiff before the country was overtaken by the forces of modernity. There's everything from a farmhouse saved from floods made by a reservoir for Birmingham, to Gwalia General Stores struggling against supermarkets. There's a Gabalfa prefab, a bakehouse and a powerful circular stone cockpit which became a slaughter house and garage before making its way here. Each exhibit is labelled and tended, furniture set out, fires laid. But until recently the museum itself, an accidental example of modernism, was the least-cared for of all of them.

Percy Thomas Partnership designed and built the stretching main building through the 1970s. It is one of those sparing, elegant yet monumental sculptural buildings. It took visitors into the 40ha site, stepping up a level with a courtyard in the centre. In an outdoor

museum with tens of other buildings, perhaps it is not surprising that this modern one was a chopped and changed without much strategy or respect. Later a café and loos were added to the front, squeezing the entrance for this most popular of Wales' free attractions into a tiny lobby. The main entrance became a carriage park and the courtyard was neglected.

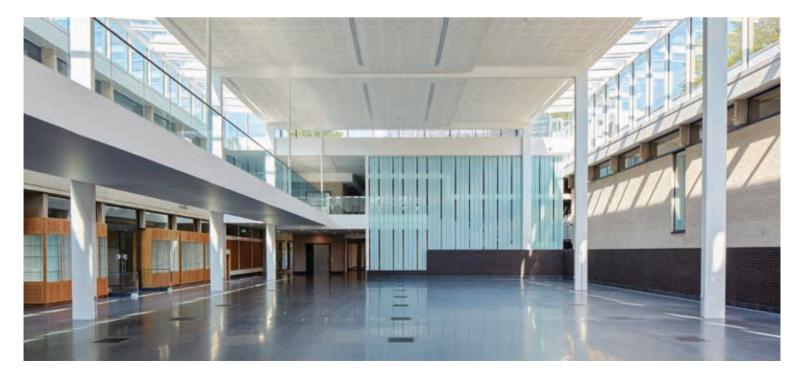
When Purcell won the job to refurbish the main building there were some important aims. To start with, a better building to welcome visitors, education rooms that could give relaxed working spaces to accommodate school groups, more gallery space and a bigger café. The architectural ambition to release the simple power of the building

The courtyard was roofed to become the central atrium. At the end the black retaining wall steps down in a memory of the original, the cast glass echoing that fenestration.

perhaps remained unstated but is there nevertheless, although some compromises with CADW, the Welsh guardian of listed buildings, are rather uncomfortable. So the later additions have been demolished, the courtyard roofed over to create an oversized entrance space, and new servicing run through the building. A new restaurant and permanent gallery has been added to the west and a large education suite to the east.

It is again an indoor place of refuge at the outdoor museum, the new home of its archaeology collection, rooms for explanation and education, and the biggest cafe on the site.

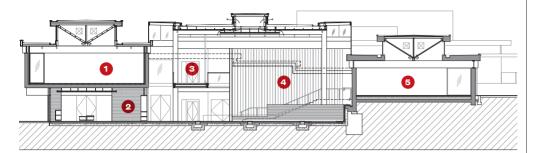
Near the beginning of the project the building was grade II-listed as 'one of the foremost essays in pure modernism in Wales'. John Hilling, the original architect on the job, is proud to see his building listed. It grew, for him, out of a college thesis on outdoor and folk museums and when Percy Thomas Partner-

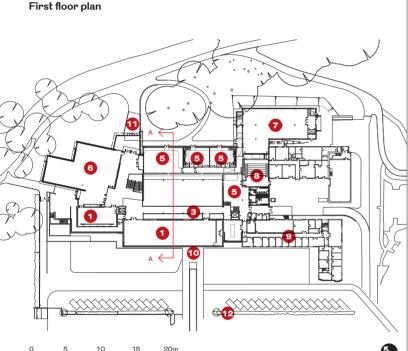


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BuildingsRefurbishment

Section A-A





- 1 Gallery
- 2 Shop
- 3 Walkway
- 4 Courtvard-atrium
- 5 Activity/education room
- 6 New gallery
- 7 Store
- 8 Lecture theatre
- 9 Office
- Main entrance (ground floor)
- 11 Entrance from outdoor
- 12 Carpark

Above right Inside one of the education rooms. Below The refurbishment has stripped away layers of addition on the front facade revealing the clear lines of the original.



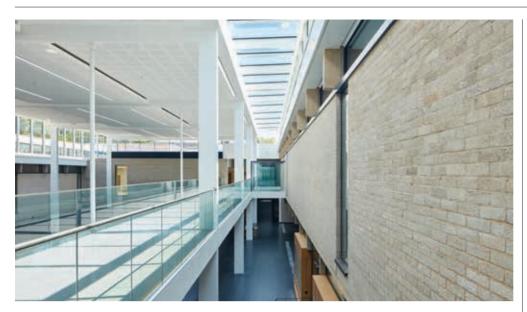


ship won the project he begged to be part of it. He made concrete beams as slim as possible to replicate timber's role in early houses.

The original architect and client visited Scandinavian projects - the 1963 Munch Museet, Oslo, and Louisiana Museum of Art near Copenhagen. That clarity of open and closed has been translated here, although any nuance of interaction with the landscape taken from the Louisiana museum was since lost. The external courtyard with pond was no longer visible and the relationship of the original building with the wider landscape undercut. It is not clear whether this will ever be reinstated: it now has a field of parking to its most open elevation and the original exhibition galleries have become, for the most part, greyed-out internal spaces. While large picture windows in the new galleries could connect with the landscape and exhibits, whether they last will also depend on the exhibition design.

Purcell project architect Lee Griffiths started his career at Percy Thomas Partnership, before this Welsh institution was absorbed into Capita. He showed Hilling Purcell's proposals as they developed. Like many sixties buildings of this style the building has a strong architectural expression. Long projecting beams run the depth of the front and back ranges, resting on elegantly muscular brick-clad piers. They make a rhythmic composition for the facade with huge stretches of glass in between, which are now doubled glazed.



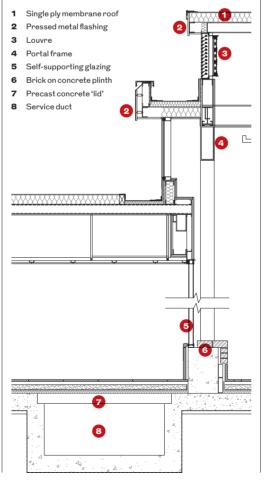


Griffiths admires them, though with a little bemusement about how things were set out; each piece of new glass had to be cut on site as that seemingly regular structural rhythm varied by up to a brick length on some bays.

The long spans required heavy opening top lights, and with some questions about the strength of the slender original structure, fixing to the concrete had to be avoided. So changing top hung opening lights to ones hinged at the base was less structurally demanding. Griffiths had hoped to use just one actuator on these large pieces of moving glass but in the end two were required. With the removal of later additions, a new roof and renewed flashings, the building has a clean composition again. Repositioning the entrance to the centre means that as you arrive the building is laid out handsomely in front of you.

The very clearly articulated original structure was designed in a different era of calculations. For largescale first floor exhibits - like one Celtic cross that reaches up through the 3m high beams - this meant reinforcing the floor before installation with new steel trimmings running across 1970s reinforced concrete beams. This cautious approach is also reflected in the structure of the bridge that crosses the enclosed courtyard, linking the education centre and galleries and one side of the portal frame for the new roof (there is an essay to be written on working efficiently with sixties structures). The 'floating' ceiling doesn't quite appear to float as the layer of clerestories hung off the cantilevered ring beam need wide mullions to deal with lateral wind loading on the large panes. Also re**Above** A new walkway across the atrium allows a one-way flow through galleries and gives easy access from the education centre to the rest of the outdoor museum.

Detail through courtyard roof and floor



quired was an internal retaining wall to hold up the rear range of buildings in the now-levelled courtyard. This reads like an oversized black plinth, the L-section concrete wall standing proud of the facade and foundations.

Another challenge was posed by the two ranges of galleries to the front and back of the building. In the Purcell scheme one range is being re-used as a gallery, the other as three education rooms. Each had double strips of clerestories on either side with a hessian-covered soffit on a V-section trough disguising sparse services running through the centre. In the most recent refurbishment, air conditioning was installed and many of the bays flattened into boringness. Bringing them back to their V-shaped character - sadly without the hessian - took the insertion of plasterboard and vents to allow for mechanical ventilation when necessary and extra steel Ts to ensure it would all stay up. The front range of galleries have been protected from relative humidity by glass walls to make partially enclosed lobbies above the main entrance.

All this consideration of detail and structure, as well as the significant extension, makes this building easier to appreciate as an 'essay in modernism' but not one that has quite regained the depth and nuance it was conceived with. Perhaps this was never going to be achievable with the increase in visitor numbers, and modern access and structural requirements. But archaeological objects from the city centre have a new home and the museum has a grand space for rent. It makes a functional, European-flavoured addition to this very Welsh institution.

Client National Museum Wales Architect Purcell Structural engineer Arup Contractor Kier



Above The view from the reinstated stepped-back facade on St Fagan's main building designed by Percy Thomas Partnership. This space is now a café.

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Slim insulation saves energy and space

Eurowall + gives designers a new weapon in the drive to improve the thermal performance of walls in new homes

In the quest for improved energy efficiency, designers can be left with little option but to increase the thickness of insulation in a dwelling's external walls. This additional insulation can be added internally, externally or within the cavity, all of which reduces a home's internal floor area or increases its external footprint, which for housebuilders can mean smaller rooms or fewer houses per plot.

In response, Recticel launched Eurowall +. This premium, full fill cavity insulation board is manufactured from high performance closed cell polyisocyanurate (PIR) foam. It has been developed to allow designers and housebuilders to maintain existing masonry cavity wall build-ups, while achieving a U-value of $0.18\,\mathrm{W/m^2K}$ to enable compliance with Part L1A of the Building Regulations 2013 in England and Part L1A of the Building Regulations 2014 in Wales.

Eurowall + is ideal for progressive housebuilders striving to offer homes that minimise energy consumption, improve comfort for occupants and deliver a more sustainable future. It suits all types of residential development, from large housing sites to one-off premium homes, as the following case studies demonstrate.

Above The Mentmore Homes development in Gerrards Cross, Buckinghamshire.

Designers and housebuilders can maintain existing masonry cavity wall build-ups, while achieving a U-value of 0.18W/m²K

Case Study 1: Impressive thermal performance

Eurowall + was used by Mentmore Homes in the construction of two energy-efficient, detached five-bedroom homes in Gerrards Cross, Buckinghamshire, valued at £2.5 million each.

These high quality, traditionally constructed homes feature external walls built using brick/block cavity construction. This is the UK's most common method of wall construction for residential dwellings. For Mentmore Homes, a significant challenge was to retain a standard-sized cavity while complying with the latest Building Regulations.

To maximise the thermal performance of external walls without increasing the width of the 100mm wide cavity, Mentmore Homes specified 90mm Eurowall + full fill insulation.

A nominal cavity width of 10mm between the insulation and the wall's outer leaf means the board fills the cavity while leaving space for bricklayers to 'roll' the bricks into place. This ensures that bricklaying for a full fill cavity is not significantly different from a conventional partial fill cavity wall construction.

Eurowall + also incorporates a precision-cut tongue and groove joint on

all four sides of the board. As a result the insulation panels fit snugly and securely together to deliver the wall's thermal performance by minimising heat loss through thermal bridging. The innovative joint also offers increased protection against wind-driven rain and improves air tightness.

Using this high-performance PIR insulation board enabled the developer to meet the thermal performance required to achieve Building Regulation compliance.

A total 500m² of Eurowall + boards were used in the wall construction of the two houses. Nicholas Peck, contracts manager at Mentmore Homes, was impressed with the performance of Eurowall +. 'We wanted to make the properties as energy efficient as possible; to make this happen the best place to start is the insulation,' he says. 'Specifying Eurowall + meant we didn't have to increase the size of the wall cavity and lose space inside the properties.'

The panel's interlocking feature was another element of the product that Peck says was beneficial: 'Eurowall +, because it slots together so easily, will remain solid and airtight,' he explains. 'We required a high-performance product for this extremely high-profile project and Eurowall + didn't disappoint.'



Top right A finished house by developers Foreman Homes in Hampshire.

Left Eurowall + in situ at the Mentmore Homes Development.



Case Study 2: Ease of installation

Ease of handling and simplicity of installation were just two of the reasons Foreman Homes selected Eurowall + to insulate the walls of the homes on two large housing developments in the south of England.

The schemes at Hedge End, Southampton, and Ludgershall, Andover, together contain a mix of over 300 plots of social and private housing; homes vary in size from two- to five-bedroom.

Eurowall + was designed to future-proof cavity wall construction. The 90mm board for a 100mm cavity can achieve a U-value of $0.18 \text{W/m}^2 \text{K}$. Also available are boards of 115mm for 125mm cavities and 140mm for 150mm cavities, capable of achieving $0.15 \text{W/m}^2 \text{K}$ and $0.13 \text{W/m}^2 \text{K}$ respectively.

Wall construction is simple with Eurowall +.

- The inner block leaf is constructed first, allowing any mortar protruding into the cavity to be cleaned off and the insulation to sit flush against it.
- The Eurowall + boards are then placed against the inner leaf with the tongue and groove joints tightly interlocked and vertical joints staggered. Boards are installed with the horizontal tongue joint facing upwards.
- To help the installer fit boards the right way, a different gas-tight foil-faced finish is used on each side: one is a distinctive grey alkali-resistant facing or placing against the inner leaf; the other is a low emissivity multi-layer aluminum facing which enhances the thermal resistance of the nominal cavity.
- The Eurowall + boards are then secured

Guest content Recticel





with universal retaining clips attached to the wall ties.

 A section of the wall's outer leaf is then built up to a course above the next row of wall ties

Mark Kew, a bricklayer with Foreman Homes, applauds the benefits of using Eurowall +: 'In 35 years' experience in construction, the insulation developed by Recticel is easy to cut accurately due to the grid printed on the foil-facing side, which makes it easy to install with minimal waste. I can honestly say our quality and speed have excelled as a result of its use.'

In total over 15,000m² of Eurowall + insulation was installed. For Foreman Homes, using Eurowall + meant the homes' external walls could be built more quickly and easily, resulting in a corresponding saving in construction costs. And the full fill insulation's excellent thermal performance will mean that residents on both developments will be able to enjoy their comfortable, energy-efficient dwellings.





Above One of the 300 homes built by Foreman Homes using Eurowall +.

Opposite Tongue and groove properties of Eurowall + on full display.

Left Wall ties installed on the Foreman Homes site in Hampshire.

Gary Hunt, senior buyer at Foreman Homes, is impressed with the benefits of Eurowall +. 'We wanted to achieve NHBC standards for the thermal performance of each property so the high insulation value of Eurowall + made it the obvious choice from a thermal perspective,' he says. 'For our onsite teams, rigid foam board is a lot easier to handle than traditional forms of insulation'.

The housebuilders' choice

Eurowall + is an innovative full fill cavity wall solution that improves the thermal performance of a wall without bricklayers having to change the way they work. By

extracting more performance from the cavity without slowing on-site trades, builders can achieve better U-values without widening the footprint of the external wall, or incurring the additional design and material costs associated with larger cavities.

To ensure Eurowall + is used to optimum effect, Recticel experts are happy to provide support to installers.

Recticel Insulation's Eurowall + is certified by the BBA and is suitable for masonry cavity wall constructions throughout the UK. It is also LABC registered. •



The high insulation value of Eurowall + made it the obvious choice

EUROWALL + is an outstanding product for architects and specifiers who are working hard to meet the building regulations with cavity wall constructions. Here are some frequently asked questions about this innovative product:

Q) Why don't you need a 50mm cavity?

A) The insulation boards have fully rebated tongue and groove edge profiles that slot together stopping any ingress of water.

Q) Do you need to tape the board joints?

A) No, there is no requirement to tape the board joints

Q) Do the boards need to be staggered?

A) Yes, install the insulation boards in a brick bond pattern with staggered vertical joints.

Q) What happens with wall ties?

A) You use wall ties the same as if you were using a partial fill board. The bricklayer cuts a slot in the tongue joint with their trowel then pushes the wall tie into it, retaining discs fit onto the wall ties acting as a spacer and helping maintain the nominal 10mm cavity.

Q) What happens around reveals?

A) Wall ties continue to be installed at every second course of block work, rather than every course as is common practice, but two ties are positioned within 225mm of the reveal.

Q) What happens on corners?

A) Corner details are formed by cutting boards squarely and closely butt-jointing. A vertical 300mm wide DPC covers the corner and runs the full length of the junction.

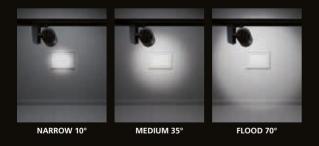
Q) How do you fit cavity trays?

A) You can either cut the insulation at an angle and run a DPC over the top of it, or use a partial fill board behind the section where the tray is going to be fitted, and ensure that board joints are taped.

If you have any questions about the product or its application visit: www.recticelinsulation.com to view detailed product guides, or contact Recticel Technical Services Department on 0800 0854079 or our Sales Department on 01782 590480 to discuss your requirements.

Concord





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BEACON XL MUSE

LIGHT THE MOMENT

Concord's award-winning Beacon Muse range is set to receive further accolades with the announcement of Beacon XL Muse.

This new spotlight boasts a complete internal redesign with even higher light output and an even tighter spot beam.

The unique soft touch focusing ring has been inspired by professional SLR camera technology making pin point adjustment smooth to the touch. With a focusing range from 10 degrees to 70 degrees, the Beacon XL Muse is the ideal lighting solution for museums and galleries. Available in 3000K and 4000K with CRI 97 (typical) objects, artwork and materials are displayed at their best.

Beacon XL Muse, the all-in-one LED spotlight solution, now features wireless dimming technology using your handheld smart device.

Intelligence



Johanna Muszbek



Budapest studio Hello Wood's 'Project Village' was initiated three years ago in the woods at Csóromfölde, near Hungary's Lake Balaton, as an architectural education experiment. The summer camp's curator discusses its genesis and where it's going

How did a small Budapest studio get to set up Project Village?

When does it run and who gets involved with it?

So what happens there?

But isn't it abandoned for the rest of the year?

Doesn't the camp just throw up the same issues of the strongest designers getting to control the output of the students?

So Project Village is refreshingly egofree is it?

Hello Wood had been doing installation experiments for years at Hungary's public festivals, having a fascination with temporal, portable architecture. In 2014 it proposed a rural settlement analysing the building of structures around themes of adaptive building methods, craft and collaboration. The studio asked me to curate a complementary programme around the social themes raised at this summer camp.

The 2017 summer school has just finished but it's getting bigger every year. There are pre and post events but the residential studios take place over eight days. This year we had nearly 150 people from 25 countries. The AA's GroundLab ran one of the seven studios, each of which has 12-14 students. They pay a minimal fee and teachers get expenses paid.

We ask each studio to develop a project - either a building to add to existing ones or an experimental response. As well as community buildings and a kitchen block, we've dug a well for water, and built showers and composting toilets. We use a petrol generator but hope to install solar panels. We have evening symposiums and social events, and actively engage with the local village. We try to keep in mind an ideal of social sustainability.

The community is nomadic and transient by definition, so yes. We haven't the funds to protect it – and wouldn't anyway. Whatever happens to the village merely creates the extant conditions for its next iteration. That said, nothing's ever been stolen or vandalised.

Interesting question. We'd like to think we challenge traditional design hierarchies and test collaborative processes so we discuss this at the end of every camp. I believe in design roles based on merit and skills. We don't use craft as a means of investigating forgotten techniques but to organise people into work processes that generate collective efficiencies.

There are conflicts; but they are important and used as an educational tool. It's not a camp of hippies but young, opinionated architects who all have views. Some people don't like compromising their projects to adapt to another; but that raises big questions about how we design cities and respond to our localities.

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Intelligence is officially approved RIBA CPD. Look out for icons throughout the section indicating core curriculum areas.



Bigger does better among largely static salaries

Large practices saw the best earnings growth according to this year's research, while sole principals and the public sector are having a tough time

Aziz Mirza

'No change' is this year's headline statistic. Average earnings remain at £45,000 − despite an uplift in the rate of inflation. Architects' earnings have now failed to keep up with inflation in five out of the last eight years since the recession. It's not all gloom though. At 7 per cent, last year's rise was healthy, and far in excess of the inflation rate. But growth has come to a standstill in the last 12 months.

Behind the headline, what emerges is a tale of two professions. Average earnings in large practices are performing well, but those in very small practices and the public sector are not so good. Financially, it's best to be a principal in a practice with more than 30 staff - these partners and directors report healthy rises in average earnings on the year, and improving salaries are feeding through to salaried architect staff, too. The picture among sole principals, and particularly those in one or two person practices, is much less healthy than this time last year. And that includes partners or directors in a two person practice. What's now emerged is that the differential between the average earnings of all staff in the smallest and largest size groups is 49 per cent. The startling finding is that, this year, the average income of a salaried architect in a large practice is greater than that of a sole principal in a practice with up to five staff.

The best age to be is 45 to 49; architects

in this age group report the highest average earnings, and this year that peak in earnings arrives at a younger age than previously.

In detail

Average earnings are unchanged on the year, at £45,000. This position of no change is a repeat of the situation between 2014 and 2015, although remember that last year average earnings rose by 7 per cent. Salaried architects working in private practice report no change, remaining on £40,000 for the second year running, after a slight increase from £39,000 in 2015. Principals in partnership record a 9 per cent rise to £60,000, again following no change in the previous year.

By contrast, the average earnings of sole principals fell back this year, to £35,000 from £36,651 in 2016. Present average earnings for sole principals are the same as two years ago, and, indeed, identical to the average in 2005.

Outside private practice, average salaries appear to have fallen in 2017. Those achieved by private in-house architects – always a widely dispersed group – is sharply lower and has returned to just above the level recorded two years ago. In the public sector, average local authority architects' salaries are 2 per cent lower, while architects working for central government report a 13 per cent fall – although last year's rise was unusually large, making this year's figure 4 per cent higher than two years ago.

London architects record the highest or

IN NUMBERS

£45,000 architects' average earnings on 1 April 2017

0 % change in average earnings, 2016–2017

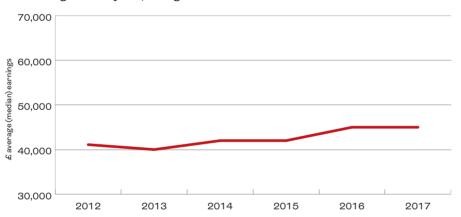
2.7 % inflation over the same period

<1% per cent unemployed

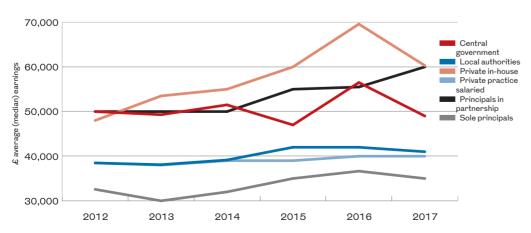
2 %
per cent not working for other reasons

Employment field	2016			2017		
	Lower quartile	Median	Upper quartile	Lower quartile	Median	Upper quartile
Sole principals	25,000	36,651	52,250	25,000	35,000	50,000
Principals in partnership	40,000	55,500	80,000	40,000	60,000	90,000
ALL PRINCIPALS	35,000	50,000	75,000	35,000	50,000	80,000
Private practice salaried	34,000	40,000	48,000	35,000	40,000	50,000
Private in-house	50,000	69,600	80,000	45,000	60,300	86,435
Local authorities	37,750*	42,000*	56,500*	36,800	41,000	47,154
Central government	45,000	56,500	67,234	40,000	49,000	59,000
ALL SALARIED	34,500	42,000	52,250	35,500	42,000	52,000
TOTAL	35,000	45,000	60,000	35,000	45,000	63,000

2 Earnings last five years, average for all architects



3 Average earnings last five years for key employment fields



joint highest average earnings in the UK – as in previous years - for every staffing category within private practice. Overall, earnings in London are 11 per cent higher than the national average. Among principals in partnership, London average earnings are 25 per cent higher than those in the next highest region. Only in one sector, central government architects, are average salaries in London lower than elsewhere; here, salaries in the Midlands & East Anglia, and the South West & Wales, are higher. After London, overall average earnings are highest among architects in the South East and the Midlands & East Anglia. Lowest average earnings overall are reported by architects in Scotland.

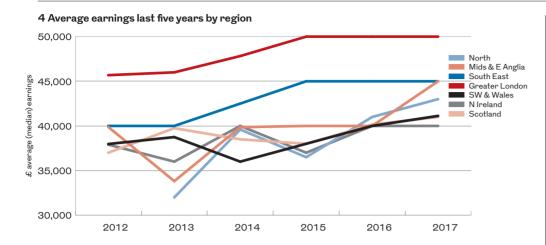
Comparing average earnings this year with last, no region records a fall. In several regions earnings have stood still, including London, the South East and Scotland. Average earnings are higher by about 2 or 3 per cent in the North and the South West & Wales, while architects in the Midlands & East Anglia report a 13 per cent rise over last year.

Age factor

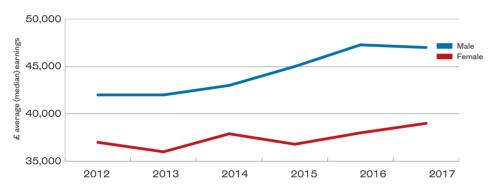
Average earnings generally rise in line with an architect's age – although this year there is a peak at 45 top 49 and a second, slightly lower, peak at age 60 to 64. Unusually, this year the average earnings are the same for architects aged 40 to 44 as those in their fifties.

For most employment fields, the pattern

Intelligence Employment & earnings



5 Average earnings last five years by gender



THE GENDER PAY GAP

The survey shows that architecture's 20% gender pay gap is not massively different from the UK figure of 18%. This sort of difference is set to become more familiar as gender pay reporting is required before 4 April 2018 for companies with over 250 employees on 5 April this year.

This may not yet include your practice but with a wide definition of 'employees', the volatility of staffing for large projects and the shift in culture it is likely to engender, it will affect practices large and small with assumptions around pay. It may also raise questions about the positions that men and women hold in the organisation. Alongside the figures, organisations will be able to write a narrative explaining any differences and detailing an action plan. The most switched on planning ahead of public disclosure on their own and government websites. For guidance on gender pay reporting see acas.org.uk

is one of average earnings rising in line with age, and peaking when architects are in their fifties or even sixties. But among principals the pattern is different. Sole principals aged 40 to 54 earn more than those of other ages; while for principals in partnership, peak earnings are achieved at age 45 to 49.

Gender issues

Average earnings for male architects are £47,280 this year; compared with £36,800 for female architects. Male earnings have increased by 5 per cent, while those for female architects have risen 3 per cent. The overall average figures show a 20 per cent differential in favour of males and continue last year's trend of a widening differential since the end of the recession. More female architects work in private practice salaried sector than elsewhere, so we have the most reliable data here. For this group, the differential is narrower than overall, but male architects still earn 11 per cent more than females.

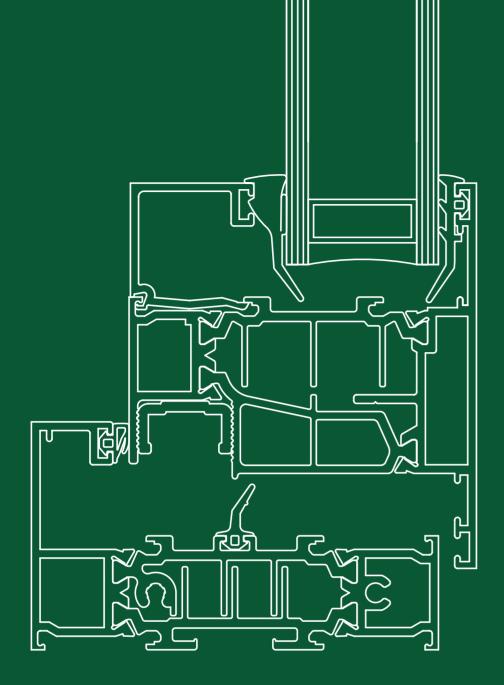
Historically, the average earnings of

architects working in large practices have generally been ahead of earnings in other sizes; while conversely sole person practices have recorded the lowest earnings. This year, average earnings have fallen in the smallest practice sizes and increased for the largest, bringing the differential between the extremes to 50 per cent. Salaried architects working in the largest practices with over 50 staff earn more, on average, than principals in practices with up to five staff.

As we've already seen, compared with last year, the highest growth is recorded by architects in the larger practices. Among principals in partnership, average earnings have increased for those in practices with more than 10 staff. Average earnings in one or two person practices have declined this year, with a particularly large drop among partners / directors in two person practices. The average earnings of salaried architects have edged up in most practice sizes with the exception of the 11 to 30 size group.

Now, 52 per cent of architects receive a contributory pension, and 10 per cent a non-contributory pension, so 62 per cent of the profession has pension coverage although this does mean that 38 per cent of architects still receive no pension benefit at all. Pension provision is highest among private in-house and public sector architects, where at least 83 per cent receive either a contributory or non-contributory pension; compared with 51 per cent of partners and directors and 80 per cent of salaried architects in private practice. But only 18 per cent of sole principals receive a pension from their business.

Conducted by The Fees Bureau, the annual RIBA / The Fees Bureau Architects Employment & Earnings Survey is a research survey conducted exclusively among UKbased RIBA members. A sample was invited to complete an online questionnaire form in April and May 2017. Together they represent private and public sectors; full and part-time; male and female; and all ethnic groups. The sample profile by age and region is broadly consistent with previous years. RIBA members can see summary statistics at feesbureau.co.uk/data or buy the full report.



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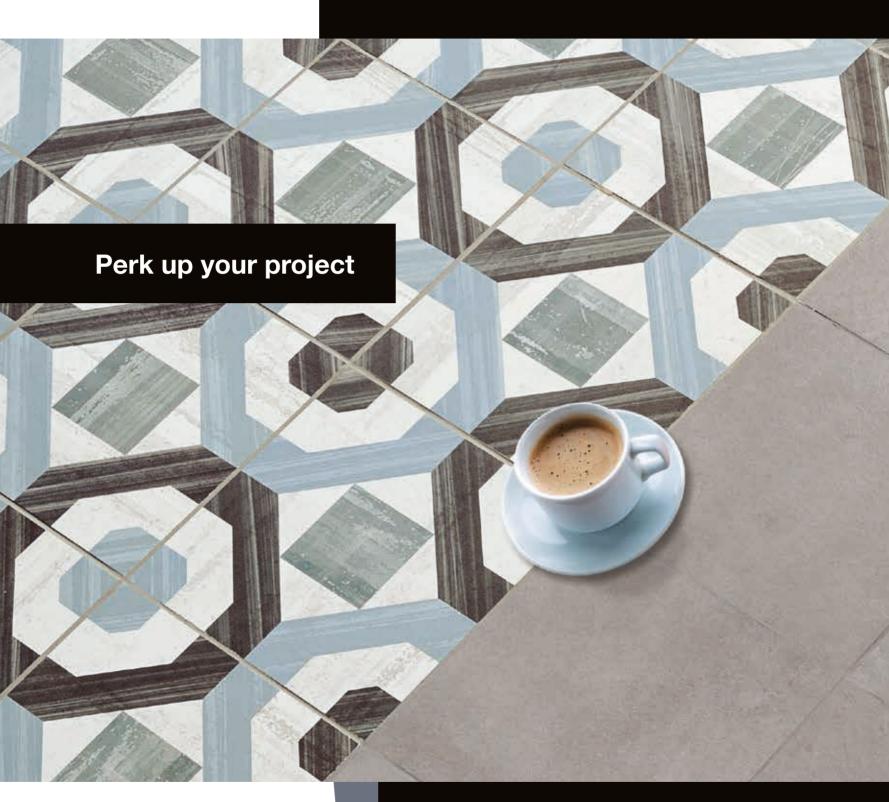


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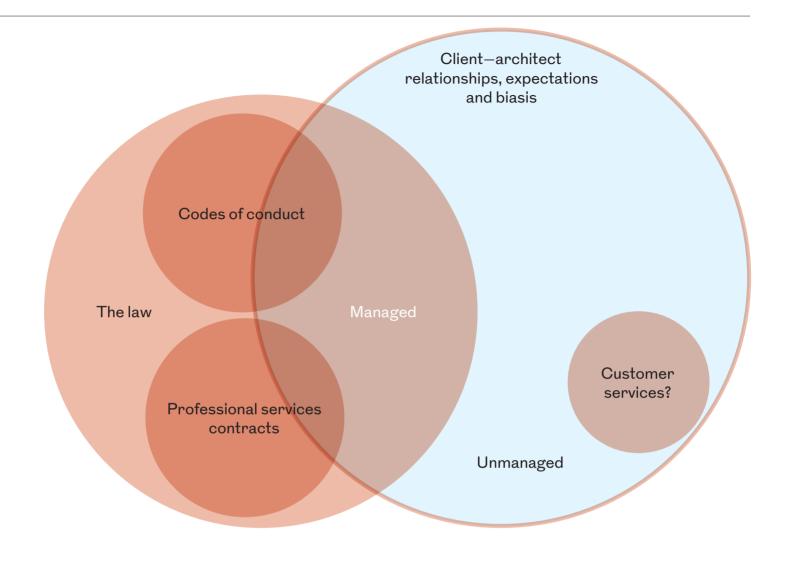


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management

How to make friends with clients

It's no use pretending clients and architects are natural bedfellows, but a bit of effort could see them unite over their common interests

Matthew Thompson

It may seem that the client-architect relationship is sewn up in codes of conduct and professional services contracts. The code assures high standards of ethical, fair, competent behaviour as a given. The contract adds to that by defining the parties' duties, roles and responsibilities; specifying the work, by when and for what fee; and a clutch of other issues, for example to cope with variations, liabilities, and how to handle disputes. Together, these two instruments align parties' expectations so that no one is in any doubt about what they are letting themselves in for.

That, at least, is the theory. In practice, though, the RIBA Client Liaison Group found that this is only half the story. Comprehensive as they may seem, contracts and codes leave a raft of other expectations and biases unmanaged. The CLG has been dis-

seminating the results of last year's Working with Architects Survey (RIBA Journal, January 2017). In a tactical collaboration with Constructing Excellence, it is out on the road with a provocative debate format designed to unveil and confront unacknowledged issues at the heart of all business relationships.

Microscopic fault lines

Based on detailed research, the CLG has over the years exposed many microscopic fault lines. The client wishes you'd come at the design with commercial value more squarely in your sights, whereas you wish the client wasn't such a philistine. The way you manage the project doesn't fit in with the client's ordinary modus operandi, while you wish the client could see beyond capex. And so it goes, hair-breadth fissures admit the acid of petty grievances that can undermine otherwise sound relationships.

The cracks spread further when third parties join the project. Not only do they bring their own feed-ins, they are also working under different terms and conditions, often with different absolute objectives. It should have been no surprise, for example, that, as discovered in the RIBA Working with Architects Survey in 2016, the relationship between contractors and architects is guite so strained.

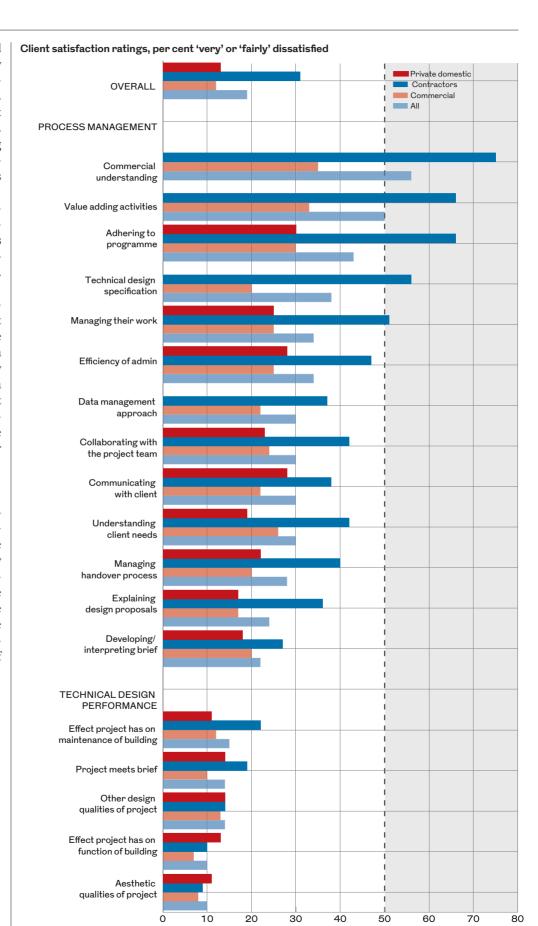
It is impractical and probably unreasonable to attempt to seal these cracks with formal paperwork. Since they turn on soft skills and ineffable qualities of mood and personality, it would be like trying to nail down mist. But they should not be ignored.

Practices are generally aware of the issues, thinking of them in the same bracket as customer service. Indeed, this is the fertile ground they cultivate to differentiate from the competition. However, it is abundantly clear from the CLG evidence that these thin cracks are at the root of any mutual mistrust and misunderstanding in the world of architectural services. Without good responsive service, small irritations can lead to poor collaboration and become big problems.

Comments and debates

The CLG chose a hybrid debate format to disseminate its survey findings. Participants – architects and client representatives – were charged not just with describing what they need from each other but also with acknowledging their own shortcomings. With the floor thrown open to the audience after the speakers had had their say, the debates have been genuinely revelatory. Here we paraphrase those findings and the comments of the debates.

The client wishes you'd come at the design with commercial value more squarely in your sights, whereas you wish the client wasn't such a philistine



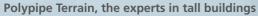
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How architects behave in delivering a contract is clearly important but the elephant in the room is the behaviour of clients. Unlike architects, they are not bound by any code of conduct other than that imposed by law. The self-evident power imbalance in the relationship ensures that architects keep shtum about their clients' peccadilloes, and so it was refreshing to hear admissions from the clients themselves.

Of little consolation to architects perhaps – but reassuring nonetheless – clients appeared to be aware of the need to be actively engaged and to take responsibility. A passive, unresponsive, inconsistent, or indecisive client with 'Teflon shoulders' is a stonking great spanner in the works for architects hoping to provide service excellence. Its opposite, control-freakery, is just as problematic.

Communication shortfalls

Clients sometimes wilfully ignore the universal truth that design quality is a function of time as much as fees. Rushing the concept and detailed design stages, for example, is a false economy if clients need cost-certainty after planning. By the same token, expecting architects to remain interested in the project during construction without commensurate fees is a stretch. Clients concede that there is a lack of empathy and even respect for architects' professional advice.

Murmurings from the architects' confessional are, for the cognoscenti of the CLG's research findings, old hat. 'Mea culpa,' they say. Not always great listeners. Not business-savvy enough. Don't speak our client's language. There's a but, though. They also point the finger. 'J'accuse!', they shout, hoping to shame clients for their unhelpful habit of hiding critical commercial information,

At the negative extreme, he said, some regard winning an award as a failure to be commercial enough

pitching consultants against each other, and allowing a culture of blame.

Architects also admit to a tendency to drown out clients' mood music with egotistical guitar solos. They are distracted from key commercial and strategic drivers – budget, programme, value – by sparkly architectural whimsy.

On the technical front, architects also don't (and perhaps aren't given the opportunity to) focus closely enough on users. They struggle with delivery, especially the timely supply of accurate, buildable information. Most importantly, they meekly acknowledge that they do not learn from mistakes, a staggering admission.

This kind of 360 degree review advances the discourse by setting the right tone. If both sides accept they have weaknesses it is much easier to weed out biases and unrealistic expectations. Indeed, the study opened the door to some deep insights as to root causes.

As much as architects wish that clients would be fairer about what they expect for the fee, clients wish that architects would be more honest about the limitations of their skills, competence and resources. There is the sense of an infantile 'I will if you will' stand-off here, mutual distrust getting in the

way of a straightforward transaction. What would it cost to put right?

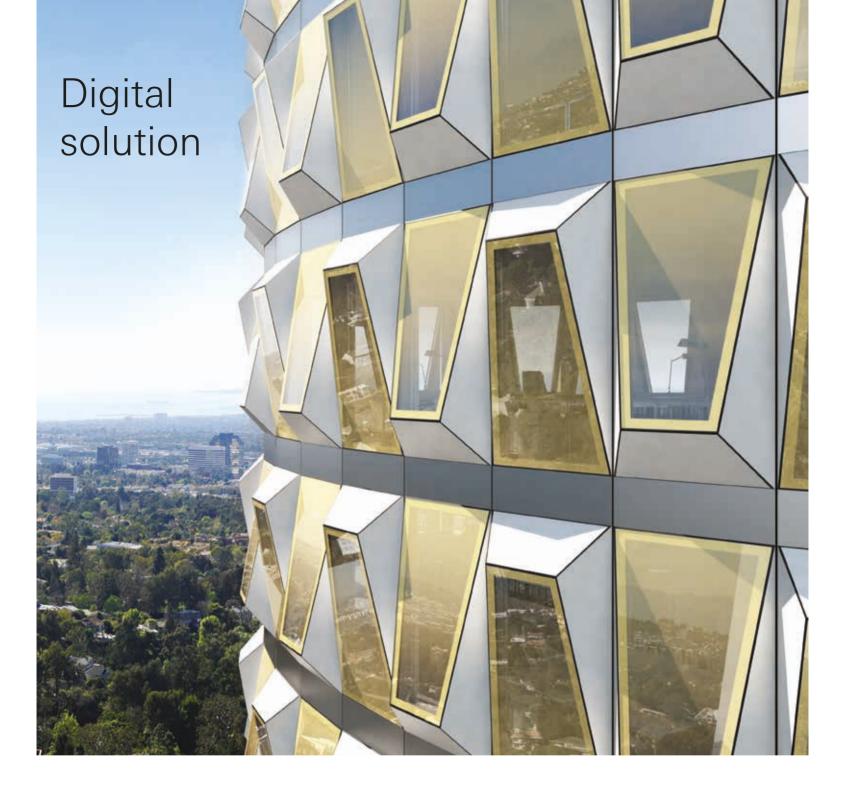
Especially in the wake of the Grenfell Tower fire, there was a strong feeling that procurement mechanics get in the way of quality, stopping people collaborating when they should. Earlier contact would dramatically improve phasing, accuracy, efficiency, and value engineering. Is it beyond the industry to rethink contracts to fix these failings?

Problems with planning

Planning cropped up time and time again. Because it is an almost binary risk factor, it distorts expectations in two ways. First, architects are vulnerable to taking on more risk pre-planning in the hope of future success, a weakness that clients are naturally incentivised to accept. This is obviously a bug deep in the system, but are there ways to counteract it? Second, clients apparently misunderstand that information produced for planning is different to that used to go to tender. Are there institutional or structural barriers to understanding, or is this easily fixed with timely education?

A developer threw the connection between quality and value jarringly into the limelight. At the negative extreme, he said, some regard winning an award as a failure to be commercial enough. Architects need to acknowledge this disconnect and, more than ever, crystallize a convincing narrative for how architectural quality impacts value.

There wasn't time to bottom out these issues but the very act of identifying them suggested solutions. Airing them in public is a good way to spread the word. It gives architects and clients food for thought to nourish future relationships and, one hopes, industry-wide improvements in productivity.



As market leaders in digital technology, Schueco have used their technical expertise to produce a Parametric 3D Façade that can be designed as a straightforward system solution, delivering the affordability and cost certainty of a series product. Highly insulated with U_f values down to 0.5 W/m²K, the surface elements can be transparent or opaque. Planning tools include 'intelligent' façade modules for CAD programs that deliver a 99% reduction in detailing time. For German engineering made in Britain, there's only one name. **www.schueco.co.uk**





Kerakoll makes a splash at Pennyhill Park

The pool at this five-star hotel in Surrey looks as inviting as ever after its refurbishment with Kerakoll UK Ltd's environmentally friendly products

Pennyhill Park is a five-star hotel and spa set in 23 acres in Surrey, owned by Exclusive Hotels. When the outdoor pool was refurbished, the architect who deals with all the company's hotels, Monia Allegretti of Archinterio, turned to Kerakoll UK Ltd. The brand's products had been used many times at the hotel and were tried and trusted, and Kerakoll's GreenBuilding philosophy fits well with Exclusive's eco-friendly approach to business.

The pool was first emptied and all existing tiling to the tank and surrounds stripped out. The walls were then repaired with Keralevel Eco LR which allows you to smooth and level the walls and floors of pool tanks for thicknesses up to 25mm. It has a long working time, making it perfect for large surface areas such as a pool and is ready for tiling after a couple of hours.

Next, all of the light fittings and hydraulic parts that would come in contact with water were sealed with Nanosil Eco, a neutral, non-corrosive silane sealant with a reduced solvent content that comes ready to use.

Aquastop Nanoflex Eco, a water repellent membrane which uses nanotechnology to waterproof, was then applied to the tank walls and floor; all exterior and interior angles were sealed with Aquastop 120 tape and Aquastop AR1, a reinforcing mesh laid over the top, before a second coat of

Aquastop Nanoflex Eco was applied.

The most important criterion when choosing adhesives and grouts, especially for the pool tank, is resistance to chemicals in the pool water. This is why Kerakoll's H40 Eco Tenaflex was specified. It is completely resistant to alkaline hydrolysis, meaning that it will not fail even in constant contact with water, and as such is ideal for use within the shell of a swimming pool. It is also high grab but easily adjustable, making the job of applying the mosaics easier.

Cementitious grouts can be attacked by the chemicals in the pool water, so the ivory version of Kerakoll's Fuga°lite Bio range of grouts was specified for the thin mosaic tiles that were to cover the pool. These are a new generation of water-based reaction resin grouts. They are tough, waterproof and resistant to UV rays so they will not fade over time even when exposed to sunlight in outdoor pools. They are also tested as hypoallergenic, making them more pleasant to work with than normal epoxy-resin grouts.

The project was completed on time and to budget with no complications to the satisfaction of the client. •

Client Exclusive Hotels

Architect Monia Allegretti, Archinterio Ltd

Tiling Tiberio Zullino, Archinterio Ltd

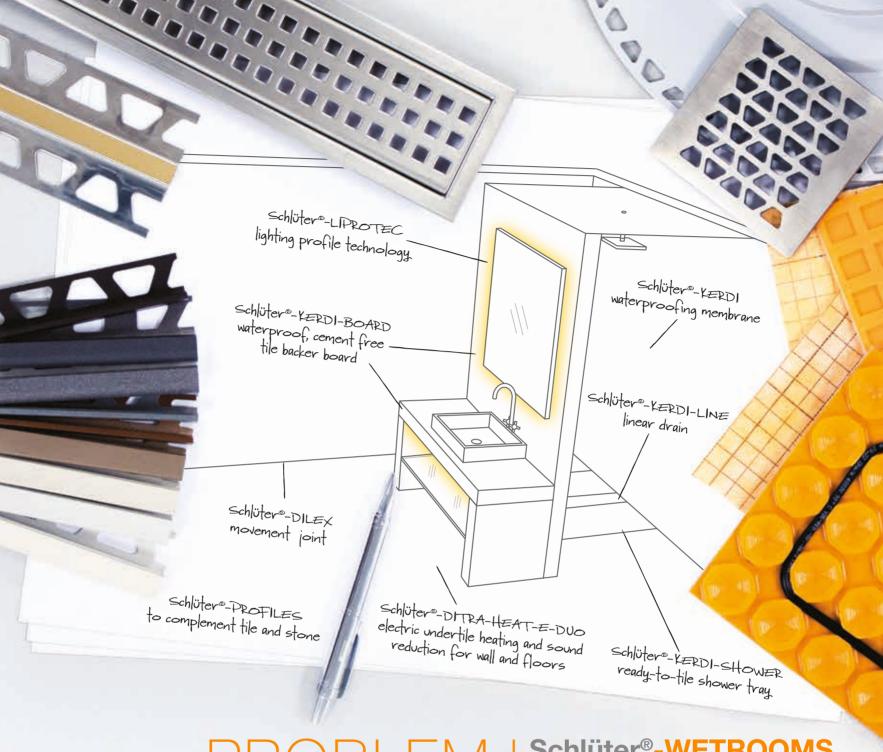


Kerakoll UK Ltd Email: info@kerakoll.co.uk Tel: 01527 578000 Web: www.kerakoll.co.uk



Far left The refurbished pool is refilled.
Left The pool tank after waterproofing with Aquastop Eco Nanoflex.
Right Grouting the mosaics on the pool floor with Fugalite Bio Ivory.





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MVRDV's Jan Knikker's proactive approach to PR and creating opportunities emphasises learning from others and sharing knowledge

Helen Castle

When in 1999 Jan Knikker, as a young journalist in real estate, was sent entirely unprepped by a recruitment agency to an interview for a communications job in Rotterdam, it set him on an unanticipated path. The interview was with Rem Koolhaas. Knikker had no more than a passing knowledge of architecture, but Koolhaas, who had also worked as a journalist before studying at the Architectural Association in London, was highly receptive to Knikker's journalistic approach. He valued his perspective and the questions that he posed, coming from outside the profession. It developed into an immensely successful collaboration. By the time that Knikker left OMA in 2008 as head of public relations, Koolhaas had gained star-architect status, and the practice worldwide renown.

Reconciling the irreconcilable

As partner of development now at MVRDV, Knikker heads up both business development and PR; he is providing the keynote for this year's RIBA Smart Practice Conference around the theme of 'New opportunities', or business development, on 3 October in Bristol. Knikker's background as a communications professional brings a strong awareness of different audiences and the conundrum that lies at the heart of architectural practice. In order to win work, practices need to be able to talk simultaneously to clients and other architects. Clients commission the work, but peer recognition is essential for winning competitions in which juries are made up of other

architects. This is a challenge, he says, as the two groups speak entirely incompatible languages and approach architecture from contrary points of view. Whereas for 'clients the user experience and economic background' are paramount, architects have 'an allergy to anything vulgar and commercial and love to hear about craftsmanship, material choice, spatial configurations and concepts'.

So how do you bridge the gap between the two audiences? With difficulty. In recognising this issue, MVRDV has had to make a tough call. An internal straw poll revealed that only around a fifth of clients had an expert understanding of architecture. For this reason, MVRDV highlights the user experience in its communications rather than pandering to its peers. This is most prevalent in its in-house visuals – highly illustrative, brightly coloured renders populated with jaunty figures engaging actively in interior



and exterior spaces. The emphasis is on the positive social influence that well-designed buildings can have, using a style that exudes happiness. On the flipside, the architectural community can all too readily perceive it as populist and lightweight. Knikker admits: 'Our architecture is often experienced as badly detailed, loud one-liners by peers, which can be quite a challenge when participating in competitions. We face very heavy scrutiny by juries.' So MVRDV counters this by giving lectures and communicating directly with the architectural media, going 'to great lengths to explain the layered meanings in our buildings'.

Strategising opportunities

MVRDV's business development and PR team is made up of 12 staff, who sit together at a single table. The six-strong business development team feeds work from across the globe to the 200 office staff, which are split into seven design departments. The largest contains around 30 designers and the smallest 10. Two studios specialise, one in strategic urbanism and the other in public projects. The others are more geographically focused, so they contain staff with knowledge of relevant building codes.

During the 2008 financial crisis, Netherlands-based MVRDV lost a third of its portfolio and went global. Now, 10 to 15 per cent of its work is in mainland China, but it is also strong in the USA, Korea, Taiwan and Indonesia. The business development team tracks the media and advertisements for competitions, and monitors economic and political shifts. A primary source of business intelligence is the Dutch government. MVRDV is

Our architecture is often experienced as badly detailed, loud one-liners by peers, which can be quite a challenge in competitions



Left New render for MVRDV's EXPO 2000 Netherlands Pavilion, which is to be integrated into the City of Hanover's university facilities: the visual displays MVRDV's 'happy' house style, depicting a student and butterfly in the foreground.

the biggest architectural user of the Dutch trade service, provided by the ministries of trade and foreign affairs. Its early warning of the economic downturn in Turkey, for instance, enabled the firm to rethink its participation in several seemingly great projects.

For the Dutch, diplomacy is all about trade and supporting commerce. Creative industries are invited to join trade missions, where the presence of the king and queen boosts potential business. Equally, MVRDV can call any Dutch embassy in the world and receive an economic profile in a week. To keep strategic focus, a list of target projects is ranked and prioritised at Knikker's weekly meetings with the heads of department and partners.

More than anything, MVRDV seeks out clients that are ambitious and want to make a difference. Unlike Zaha Hadid Architects, Richard Meier or Frank Gehry, the firm does not sell a signature style. Knikker describes its approach as being about 'social interaction, clear communication, user friendliness, intimate cities and some more values that describe architecture, but do not form an instant image'. It is a nebulous progressive spirit that fuels MVRDV.

Consolidated learning

Over the last three years, MVRDV has more than tripled in size, growing from 65 staff in 2014 to 200 today. Immediately after the 2008 downturn, it trod water and concentrated on internal development, undertaking the successful adoption and implementation of BIM, BREEAM and LEED.

Concerned that the increase in size could potentially dilute its original ethos, MVRDV has devoted the last six months to consolidating and educating its staff. It has taken stock of what kind and scale of practice it wants to be, learning from organisations such as internet start-ups, large artists' studios, tech giants and other practices. These have included Studio Olafur Eliasson in Berlin and White Arkitekter in Stockholm. Knikker was particularly inspired by the generosity of White Arkitekter: an employee-based company that was 'so open and happy to share its insights' and 'saw the value of collaboration', despite often having been head to head in competitions with MVRDV. Knikker shares this transparent spirit - during our conversation suggested the name of another Dutch practice as a speaker at an RIBA event to me. For now, MVRDV is at a crossroads. In January 2018 it will decide on the new direction, shape and size of the practice. Until then, it is business as usual, strategically pursuing new opportunities.

New Opportunities: RIBA Smart Practice Conference is on 3 October in Bristol: architecture.com/whats-on/smart-practiceconference-new-opportunities Helen Castle is RIBA head of professional programmes and consultant editor of Architectural Design





Top MVRDV's Markthal in the centre of historic Rotterdam epitomises the socially progressive spirit of the firm's work. A popular destination, it successfully combines two different building types: a covered market and an arched apartment block.

Above MVRDV's Seoullo 7017 Skygarden in Korea: the project that transformed a disused urban highway into a botanical walkway has received more than 2 million visitors since it was opened in early May.





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Material concerns in a post-Brexit world

With the industry importing nearly a quarter of its products, post-Brexit uncertainties threaten cost and supply concerns for construction

Brian Green

For the working life of most architects, imported products have formed a large part of what they have specified. Somewhere between 20% and 25% by value of the materials used in UK construction come from abroad.

It's not just specialist items that you can't get at home that are imported. It's not just exotic or fancy stuff. Sure, we imported £100 million worth of glazed ceramic tiles from Spain and £33 million of unglazed ceramic tiles from Italy in 2016. And timber makes up a large slice of what's imported, which is fair enough as we don't grow enough in the UK.

Intriguingly though, the biggest building material category for imports is electrical wires. More than £1.7 billion worth was imported last year. China sells us the most (17% by value in 2016), but it comes from all over the world, Italy, Turkey, Germany, Poland, USA, Netherlands, even Egypt. And we see the stuff all over the world too. £720 million worth of electrical wires was exported.

Lamps and fittings came in as the second largest category imported, at just under £1 billion, followed by sawn timber (thicker than 6mm) at £840 million. Steel and aluminium structures, paints and even relatively cheap stuff for its weight, like bricks and concrete blocks, are imported. The top $25 \, \mathrm{imports}$ and exports of building materials can be seen in Table 1 (a & b).

In cash terms the total amount of building materials imported is estimated at £15.5 billion for 2016, which is what you'd expect from historic trends. Construction's demand for imported products is long-standing and relates directly to output. More or less, in each

of the last 40 years, for every £10 of construction output roughly £1's worth of building materials is imported. Though not all is used by the construction industry; some will go to DIY stores and in-house maintenance teams.

The closeness of this relationship can be seen in Chart 1. It seems extraordinary that it has held so tight for so long given that over time there will have been significant variation in the mix of imports, what we build, the nations from which we imported, the costs of

Table 1a

Top 25 imports 2016	
	Value (£k)
Electrical wires	1,723,408
Lamps & fittings	974,087
Sawn wood → 6mm thick	839,108
Central heating boilers	624,978
Air conditioning equipment	585,425
Plugs & sockets	500,581
Aluminium for fabrication	499,089
Paints & varnishes	478,285
Taps & valves	410,657
Linoleum floor coverings	406,260
Builders ironmongery	386,920
Structural units (aluminium)	354,039
Structural units (steel)	315,462
Steel for fabrication	313,899
Fan systems	291,112
Laminated wood	283,744
Doors (wood)	253,767
Copper pipes	243,920
Other plastic building products	236,820
Glazed ceramic tiles	230,252
Ceramic sanitaryware	211,934
Mastics, putty	211,202
Building stone: processed	202,356
Fire & security alarms	199,214
Radiators	191,402
Sources: BEIS, HMRC	

production of products and exchange rates.

Whatever it is that binds this relationship so fast, the big thing that all the above shouts is that the UK's construction industry is tied intimately into global trade.

So what does this all mean for architects? Unless there are extraordinary (although what defines extraordinary today?) U-turns made in many quarters, from April 2019 onward the UK's trade relationships will be fundamentally changed. The transition to a post-EU trade regime may all go smoothly. But there are distinct signs that there will be plenty of hiccoughs on the way. This may spell both temporary and long-term problems for those sourcing materials.

Falling sterling

Meanwhile, in the shorter term UK firms have to deal with the consequences of the sudden fall in the value of the pound in the wake of the EU referendum. The effect has been to create large inflationary forces as the price of imports rise when paid for in sterling. Chart 2 illustrates the scale of the fall in the pound relative to both the US dollar and the Euro.

More than 60% of imports come from the EU. China accounts for 17% and between

Table 1b

Top 25 exports 2016	
	Value (£k)
Electrical wires	719,004
Paints & varnishes	608,867
Lamps & fittings	365,656
Plugs & sockets	360,728
Air conditioning equipment	341,180
Air purifying equipment	280,143
Fire & security alarms	259,382
Linoleum floor coverings	254,922
Steel for fabrication	187,925
Structural units (steel)	184,956
Plastic pipes	169,448
Aluminium for fabrication	167,404
Builders ironmongery	164,438
Mineral insulating materials	162,358
Mastics, putty	161,516
Other plastic building products	137,243
Fan systems	129,403
Central heating boilers	110,813
Taps & valves	106,239
Copper pipes	89,210
Wallpaper	84,552
Steel tubes & hollow sections	68,917
Meters	68,282
Water heaters	65,656
Structural units (aluminium)	62,977
Sources: BEIS, HMRC	

Intelligence Market analysis

them USA, India and Turkey supply a further 10%. Working out the impact of weaker Sterling on import prices is far from straightforward. The data are a bit hit and miss and the speed at which inflation finds its way into the system is far from evenly paced within product streams, let alone between them. Terms of purchase will vary, some firms will hedge, while others will have bought well in advance. And the materials will be sourced from a range of countries and currencies.

Still, armed with some data kindly supplied by the Construction Products Association showing the volumes and values of imports of building materials in recent quarters, collected by HMRC, we can make a stab at gauging the overall jump in prices since the plunge in the pound.

There will always be some volatility in import prices, both up and down, for individual products categories, especially when they are linked strongly to energy prices. However, whether we use the mean for Q4 2016 and Q1 2017, the median for the six pre-referendum quarters, or a straight Q1 2016 versus Q1 2017, the results may be different but they all say the same thing. There has been a steep rise in prices since the EU referendum. You'd expect some inflation over what is effectively 15 months within the calculations. The Eurostat data tracks materials costs in local currencies for residential building. It shows the Euro countries experiencing inflation below 4% in construction materials. The UK saw rises of about 6%, significantly higher. If the differential is mainly down to imported materials this suggests the big leap in prices.

Taking the Euro area as a base for expected rises, we might reasonably expect to see rises of below 5% in the imported materials. Among the top 20 most imported material categories when comparing means two, glazed ceramic tiles and structural units of steel, over the period. 12 of the 20 categories came out as experiencing double-digit inflation, with air conditioning units up by between a quarter and a third in price.

Prices and purchasing

Comparing average prices before the referendum with those in the latest two quarters suggests, if we look at just the top 20 import categories, an average increase of 12%. Comparing first quarter 2017 with the same period in 2016 suggests a rise nearer 20%.

Before taking this as proof, we have to note that price rises cause changes in purchasing. The quality mix within each tonne will vary. Higher import prices may have seen a substitution for home grown products, which could alter the average quality of that imported. Equally there may have been substitution of expensive for cheaper imports to ease cost pressures, lowering quality. Without forensic investigation it's hard to know.

Clearly this is not hard and fast, but these sums do indicate a sharp rise in the price of imported building materials following sterling's slump. This will in many cases put pressure on specifiers to seek cheaper alternatives.

However, a bigger problem for architects and other specifiers probably lies in the fu-

ture. They will have to keep close tabs on where UK trade deals are going, most importantly tracking how we will be trading with the EU post-Brexit. About 15% of our construction materials are imported from the EU.

If the UK ends up with a dog's breakfast of a Brexit agreement which stalls the flow of goods, it will disrupt construction and add an extra dimension to the risks associated with specification. It may add price, but it could also add uncertainty of supply.

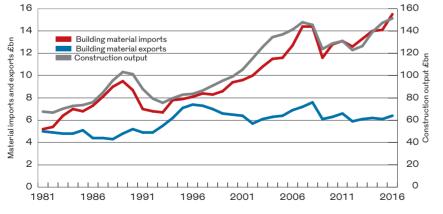
With many, if not most, of the major players in the building materials industry multi-national companies, their ability to smooth supply and demand across the whole of Europe may be compromised. Were this to be the case, it could have two irritating consequences for UK construction. The first and most obvious is a price premium in the UK. The second could however prove more expensive – more erratic supply.

For those that might argue that this new trading environment may encourage greater production in the UK, there is a stark warning in the import-export figures (see Chart 1). While imports have grown with construction output, exports have remained flat and the trade deficit has grown.

This suggests one of two things. Either we are better employed in other areas of the economy than the production of building materials so are happy to leave it to others, or we are not as competitive.

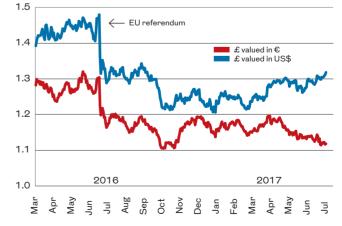
For those who scout for building materials it seems appropriate to follow the motto 'Be prepared'. •

Chart 1: Construction output and materials import



Source: Monthly Statistics of Building Materials and Components, BEISNotes: The data are crude and authors adjustments were necessary to splice data series together. There have been changes to the materials included over time, so the series provided should be treated with caution. To adjust for the effects of inflation on a consistent basis, HM Treasury deflators were applied to the current price data. The chart however does strongly illustrate the relationship between construction output and building materials imports.

Chart 2: Spot exchange rate: Sterling into Euro and US dollars



Source Bank of England Note: The data is take from the Bank's interactive data for the daily spot exchange rates US \$ into Sterling and Euro into Sterling



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Procurement & contracts

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Offsite goods: what to keep an eye on

Offsite manufacturing carries risks as well as benefits. What should you be watching out for?

Angus Dawson

Offsite manufacture is taking centre stage in discussions about the future of the construction industry, and the residential sector in particular. Those project managing developments and/or administering building contracts need to be aware of six issues in particular with offsite manufacture?

Current contracts Most construction contracts are drafted with traditional construction practices in mind. Existing provisions for payment for goods and materials stored elsewhere can be extended to cover elements of offsite manufacture but significant offsite manufacture may require a different contractual arrangement.

Ownership Ownership of items should transfer to the client when it pays for them and the contractor/manufacturer should be required to provide evidence that it is able to pass ownership to the client when it is paid. This may not be possible if the contractor/manufacturer is seeking payments for incomplete items; and trying to offset the risk of not owning the incomplete item by transferring ownership in the constituent parts may be of limited effect both legally and practically. For example, do those parts have any value for a client if a replacement contractor/manufacturer cannot use them? A practical alternative is to restructure payment/manufacturing timetables so that the client has less cash exposed for a shorter time. *Risk and insurance* Risk in goods/materials generally passes at the same time as ownership and, as ownership tends to transfer on payment, risk may pass to a client when it has no control over the items or where they are stored. This can be resolved by the storage party taking the risk of damage or loss with appropriate insurances.

Storage and access Items should be stored separately and clearly marked to identify that they are the client's and have been allocated to a particular project. A member of the client's team should be given rights to inspect storage arrangements and, provided they are the client's, remove materials if needed.

Insolvency This is an ever present risk. Carrying out thorough due diligence and understanding the supply chain is still the best way of grasping this risk. Annual accounts may be out of date so requesting copies of management accounts and/or carrying out other financial checks may be more useful ways of establishing the financial stability of a proposed contractor/manufacturer.

If the offsite manufacturer or the storer of items becomes insolvent goods may be treated by the insolvency practitioner as the manufacturer/storage party's assets rather than the client's. Even if the insolvency practitioner is persuaded that the items are the client's, the project may be delayed if they are not released when they should be. At the most extreme the insolvency practitioner may 'deal' with the items, leaving the developer to bring a claim for damages for the tort of conversion and an urgent need to find an alternative manufacturer.

These risks can be minimised with clarity about ownership and storage requirements and a robust inspection regime referred to above. If the right steps are taken a developer should be able to recover items even if a contractor/manufacturer becomes insolvent. *Financial protection* While a bond cannot compensate for the lost time and programme implications of having to find an alternative manufacturer, it can provide an element of financial protection. Such bonds are generally on-demand and allow the client to make a call if finished items are not delivered on time.

As well as considerable benefits offsite manufacturing bring risks. However, with careful planning and structuring it is possible to mitigate them. •

Angus Dawson is a partner at Macfarlanes LLP

As ownership tends to transfer on payment, risk may pass to a client when it has no control over the items or where they are stored

IN PLAIN ENGLISH: BONDS

When dealing with offsite manufacture one way of mitigating an employer's risk where it has paid the contractor a deposit or paid for goods that have yet to be delivered to site is an advance payment bond. In return for a premium a bank, insurance company or specialist bondsman will, on receipt of a demand, pay the employer the amount demanded up to the agreed value of the bond (usually the value of the items or the amount of the advance payment). This provides protection if the contractor goes bust or fails the deliver the items to site. As long as a request is in the required format and any conditions in the underlying contract have been complied with a demand under this type of bond (known as an 'on demand' bond) can generally only be challenged on the grounds of fraud. An advance payment or 'on demand' bond should not be confused with a guarantee/ performance bond which provides security against any breach of the terms of the building contract by the contractor but requires proof of breach of the contractor's obligations under the building contract.





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External managemen

Anti-chaos theory

How to save our planning system from entropy



Maria Smith

If we want to improve the design quality of our towns and cities we need to stop focusing on relaxing vs tightening planning, and work to make it more predictable.

We all know that the planning system is broken. We all know that planners don't get to plan anything anymore: that the role of the planner has been reduced to development control or occasionally design police. Who can blame them for being a cantankerous negative lot? It's hardly a joyous position to be caught between money grabbing developers, naive designers and unfathomable politicians. It's hardly enviable to be tasked with implementing bizarre, conflicting policies and bearing the brunt of all parties' frustrations. It's hardly surprising the process is onerous, punishing, obstructive and farcical.

This state of affairs is especially exasperating because it serves nobody, except perhaps a few callous planning advisors in a protection racket sort of way. It doesn't persist because some fat cats are smugly lapping up the cream. It remains, as far as I can see, because it would be achingly difficult to unpick and restructure. This fills me with a second law of thermodynamics flavoured sense of doom. It's too complicated to fix, so we patch it up over and over again, making it even

more complicated to fix, leading us to more and more patching ad infinitum or heat death of the universe. That we've forgotten how to be propositional at scale is really part of the same problem: our built environment, like our legislation, is too complicated to unpick.

In 1971, American chemical thermodynamicist Frederick Rossini, at his Priestley Medal Address, described how civilised societies faced a trade-off between security and freedom akin to the trade-off between order and disorder in chemical thermodynamics. A guick bit of crude revision: the second law of thermodynamics states that there is a natural tendency of any isolated system to degenerate into a more disordered state. This is defined in terms of entropy: the degree of disorder or randomness in a system. Within a closed system, entropy always increases with time. This is obvious to us when we think about plates shattering and eggs being scrambled. Does it also apply to legislation; that without work being done by an external energy source, degeneration is unavoidable?

Rossini's central point was that there are many societal problems to which thermodynamics can make significant contributions. His parallels between order and security and between disorder and freedom are poignant with respect to planning. Planning is crippled by an inability to admit that security and freedom are inversely proportional. As in other walks of life, we want to feel secure in our freedom, which is to say we want the balance to be reliably weighted in our favour. We - the 'good' designers - want the planners to recognise us as a force for 'good' and allow us the liberty to build 'good' buildings. Simultaneously, we want the 'bad' players in the built environment - the slum landlord type developers building their shoe-box wealth stores etc - to be heavily regulated against. It's difficult not to feel that freedom and security go hand in hand, at least for the deserving. But in planning as in life, the stringent processes set up to prevent nasty developers from getting their own way also impinge on the freedom of well-meaning community groups or worthy designers.

Rossini believed that our society behaves according to natural law where there is a trade-off between freedom and security and that the best we can expect is to achieve an optimal balance. Finding this optimum is key, and we can find it, but only if we first acknowledge that that's what we're trying

The second law of thermodynamics states that there is a natural tendency of any isolated system to degenerate into a more disordered state

to achieve. Once we're comfortable in that endeavour, we then need to invest in a reordering of the planning system. We must invest if we are to reorder, it is a scientific imperative: it is impossible to return our planning system to order – to decrease its entropy – without a lot of work!

The more the planning system resembles a thermodynamic system the better, because a planning system that allows built environment operatives to better predict the outcome will come with enormous benefits. Key factors propagating poor design are our compromise-incentivising planning system and resource strapped design teams. A huge reason for design fees being difficult to secure is risk that the work will be abortive, and a huge contributor to this risk is planning.

Run it the other way and the consequences are scary. More onerous planning procedures increase uncertainty, simultaneously adding to design teams' workloads and squeezing fees, in turn damaging design output. Well-meaning propagators of additional layers of planning complexities – from more area-specific policies to more design reviews – inadvertently make good design more difficult to realise. Inadvertently and unavoidably: you can't unscramble scrambled eggs.

Maria Smith is a director of architecture and engineering at Interrobang

How can we make energy efficiency sexy?

A Birtley round table found some positives for sustainable building during a wideranging discussion on the drivers and incentives needed to boost green construction



Remember Saturday, 1 April 2006? No? Well, for experts in energy efficiency – or at least the 10 sitting in the private dining room of Soho's Quo Vadis at sponsor Birtley Group's round table event – it was very much a red letter day, providing a leaping off point for discussions about today's diminished circumstances more than 11 years later.

Chair Bill Gething, professor and sustainability consultant at University of the West of England, reminded us in his opening remarks: it marked a major upgrade to Part L of the Building Regs, targeting an energy efficiency boost in new-build houses of 22%, and in non-domestic heating and cooling by up to 28%. And the Code for Sustainable Homes was launched to replace EcoHomes including the (soon-to-be infamous) route map to zero carbon homes.

'It was an optimistic time when people were surprised by how far they were able to push the idea of energy efficiency,' he said. 'Everyone seemed to be behind the endeavour,' with house builders happy to raise the bar communally.

'It was a major step forward,' agreed Phil Jones, chair of CIBSE's CHP and district heating group, 'It changed the depth, scope and fit'

'The government was trying to comply with legally binding targets (EPBD) and the regs were the immediate place to look,' said BBM Architects partner Ian McKay.

But, as most agreed, it had been downhill from there on energy efficiency in buildings — and there was further to fall; 'buildings are getting worse', noted Jones. The only question seemed to be why. Of the multitude of answers, many seemed to be linked.

Bere Architects' Justin Bere, sustainability champion and clearly no fan of the current government, blamed deregulation; the 'road map' had led to a lay-by, he said: 'The ambitions have not Elton pointed out that energy efficiency training in architecture schools lasted a week for every three months spent discussing building concepts been carried through.'

Several people referred to the disaster of abolishing Building Control in New Zealand. It turns out that perhaps the regulations were OK; poor implementation, checking and policing were at fault. 'You can plan a very good building, but it turns into a mess,' said Jones.' I walk around quite new buildings and old buildings and they are just as bad.'

After all, consequential improvements are supposed to drive energy efficiencies at various triggers in domestic and nondomestic buildings. But the group was ambivalent as to how effectively this was being carried through, especially given the lack of effective government drives to improve building fabric performance. 'There seems to be a lack of incentive for housebuilders to surpass current regulations because they aren't the ones who benefit from reduced running costs later,' said Nick Murray, group technical manager at Birtley. 'Instead products such as our high performing lintels are used to offset other elements, because of their low cost vs palpable benefit compared with other fabric efficiency improvements.' But the observation did at least suggest positive, if albeit incremental changes in specification practice.

Phil Jones put this lack of incentivisation firmly at the feet of building regulation. 'Part L is the least policed part of the building regulations,' he noted, 'and retrofit is the least policed part of Part L. New windows, should bring a signature increase in energy efficiency, but I am not aware of anyone prosecuted under Part L or for not producing or showing an EPC or DECC or anything.'

'I see refurbishment going on all around me and no energy incentive on it,' agreed PDP architects partner, Marion Baeli.

Bere accused the current system of being corrupt since previously public Building Control work was being done by



private companies – whose next job with a contractor might hinge on a pass. But Baeli defended the regime saying that local authority sign-off was still required.

And while Sones said Bere was being 'too political,' there was definite buy-in to the idea that George Osborne had made 'carbon' a dirty word and kiboshed plans for DECs.

So, perhaps it was consumers who were ill-educated? Certainly, they didn't seem to care much about their leaky homes.

'If your phone used three times the energy it needed to, you would be back at the shop,' said building physics engineer and Passivhaus designer Marine Sanchez.

There was discussion about why fuel efficiency was so popular in cars but not in homes. Gething thought homes weren't sexy enough to be talked about down the pub, so 'price and energy efficiency aren't linked.'

Perhaps there should be sharing of information about usage, Sanchez suggested – 'if you knew your neighbour's home used a tenth of the energy, you would be curious.'

Some thought sticks were needed as well as carrots, such as with Seattle's net-zero homes with their rainwater harvesting. Clara Bagnell George, environmental design engineer at Elementa, told the group that residents couldn't flush the toilet when the tank was empty, having to reconnect to the mains. 'They realise they are in drought,'she said. While Baeli 'had a problem' with such drastic measures; Gething was happy to be called an energy efficiency 'fascist'.

Anyway, surely it wasn't really up to homeowners to worry about their houses' energy efficiency. 'If architects built buildings with less demand we wouldn't need to have these conversations,' said Eco Design director Mark Elton.

And so training raised its familiar head – with traditional comparisons between British and Eastern European, in this case Lithuanian – workers quoted as saying that it seemed their British counterparts were doing the job for the first time.

Elton pointed out that energy efficiency training in architecture schools lasted a week for every three months spent discussing building concepts. That's why, said Baeli, her practice was training up 15 architects 'because they are the ones who are going to have to tell the client how it's going to work' adding that 'reducing M&E was part of it'.

Another hope was that there would be a



rethink about regulations and enforcement following the obvious cost of taking one's eye of the ball with Grenfell Tower.

Bagnell George was bullish – supported by principal sustainability consultant at Hoare Lee Louise Wille – about her consultancy's proposal to fix London's energy plan to reflect the UK's increasingly low carbon electricity grid.

So positives from the day were a few breadcrumbs leading to potential improvements which, depending on future sustainability policy, may or may not be taken up by those in power.

WHO WAS THERE

Bill Gething, Professor of Architecture, Sustainability Consultant, University of the West of England, Architect (Chair)

Mark Elton, Director, Eco Design
Justin Bere, Founder, bere:architects
Marion Baeli, Partner, PDP Architects
Louise Wille, Principal sustainability consultant, Hoare Lee

Clara Bagnell George, Environmental design engineer,
Elementa

Phil Jones, Chairman, CIBSE CHP & District Heat Group, GSHPA council member

Ian McKay, Partner, BBM Architects

Marine Sanchez, Principal building physics engineer and Passivhaus designer

Nick Murray, Group technical manager, Birtley Group



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We hear you

Hugh Pearman sifts the main messages from our first Litmus Test



Hugh Pearman Editor

What is an architecture magazine for? More specifically, a members' architecture magazine? This one, in fact? We have been going since 1893. In November 2018 we shall be 125 years old. Expect some kind of party.

Slightly alarmingly, I find I have already been editor for 8.88% of the magazine's existence, so I'm going to get some analysis in early. Luckily I don't have to do this alone because, earlier this year, we set up the RIBAJ 'Litmus Group' of around 40 members and readers from all types of practice who have kindly agreed to offer views, opinions and criticism.

In fact, we did a remarkably detailed consultation exercise before we relaunched the RIBAJ in its present form in September 2013. Independently-run focus groups involved architects carefully selected for their variety and geographical distribution. We watched through one-way mirrors and backed the process up with phone and email surveys. The result was a mass of inevitably sometimes contradictory data but you know what? I don't think it told us anything very different from what any six architects would tell you in the pub. Just in much, much greater detail.

The Litmus Group is a way of getting a continuing, slightly less informal response



1921 cover designed by CFA Voysey.



Our May issue, designed by Linda Byrne, was Litmus tested.

from readers and it's done remotely, pub attendance not required. The first such exercise looked at two issues of the Journal and ribaj.com. Crunching down the 40 pages of responses yields five key responses.

First, the vast majority likes the overall look and feel of the RIBAJ. 'Stands out in the pile of other magazines' was one comment.

Then in the Buildings section – well received on the whole – there's a desire for more drawings. One critic sees our building studies as 'puff pieces' along with the profiles. Crikey – we can be woundingly critical, you know.

Intelligence and Culture sections are seen as strong – though some feel that academia is neglected. Some want the Culture section expanded, one wants to see more practitioners rather than critics writing.

Our annual awards issue – broadly welcomed – had some dissent. One said it was 'just a glorified list with tiny pictures and some brave words cut down to fit the pages available – I want to know more.' In contrast another called it 'a really engrossing read'.

Finally, it's print rather than digital that is still the prime interest – almost everyone concentrated on the print offering even though there is twice as much material (including a much-expanded Culture section) available at ribaj.com, free to members who register. We'll be taking a good look at that.

That was a really instructive first Litmus Group outing – thank you to the members who gave their time and insight. We are in increasingly challenging times economically but I hope we'll keep as many of you as happy as possible. What came through very clearly is that members rightly critique their journal as we do their projects, but they value the RIBAJ as the 'quality object' part of their membership. And you don't have to be a Litmus Group member to join this dialogue. Anyone can – just email us with publishable comments and suggestions at letters@ribaj. com. We really value it. Conversation is always better than monologue.

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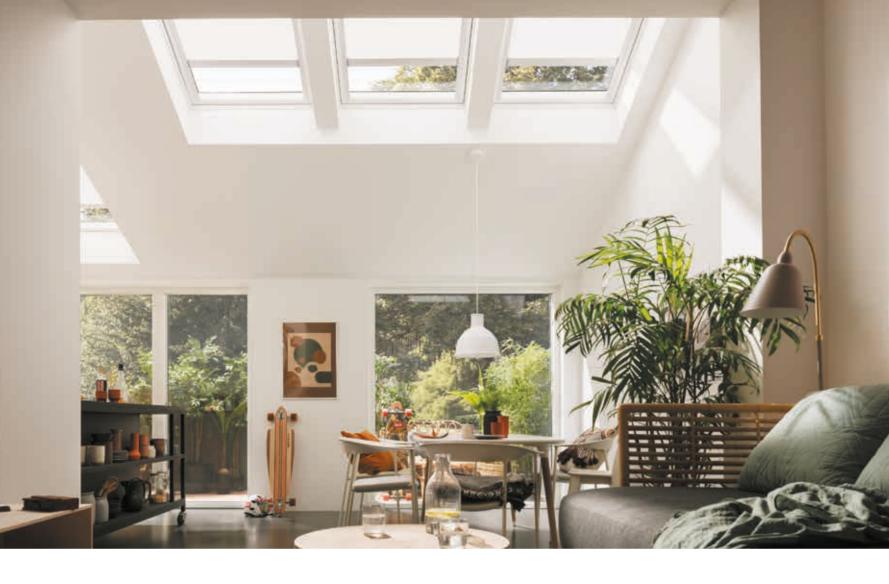
Image boards and backgrounds make clear the sharp contrast between the old and the futuristic new architectures

Pamela Buxton walks

Pamela Buxton walks the streets of anime films: https://is.gd/ animearchitecture

South Woodham
Ferrers could
be viewed as the
spatial corollary
of Margaret
Thatcher's
particular
combination of
social conservatism
and economic
liberalism

Charles Holland looks back at urban visions of utopia in dismay: https://is.gd/ swfnostalgia



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That extra something

Greebling will pep up your models, advises Will Wiles



Will Wiles

Drawing, computer visualisation and model-making could be considered architecture's subordinate arts – arts that serve the making of buildings. Even in the service of architecture, they can still be of significant artistic worth in their own right, as RIBA Journal's Eye Line award for drawing shows each year. But to what extent do they feed back into architecture and shape the buildings they reflect?

In his intemperate classic From Bauhaus to Our House, Tom Wolfe suggests that one of the reasons architecture students came out so strongly for modernism in the 1930s and '40s was that they were impatient with the 'laborious washes of china ink' of the Beaux-Arts manner: 'No more tedious Renaissance renderings! After all, look at Mies' drawings. He used no shading at all, just quick crisp, straight lines, clean and to the point.'

As it's Tom Wolfe, we have to take this with a grain of salt, but it's a diverting thought. Similarly, was the architecture of the first year of the 21st century guided by the peculiar graphical qualities of computer visualisation? Frank Gehry's curves and angles were made possible by CATIA, opening the door for the decon and iconism of that era, but I'm thinking more of the renderings than the underlying design. Where would the early 2000s have been without the exotic, intangible quality surfaces flush with a jillion colours on an iMac screen? The end result might be anodised or galvanised under

Think of the giant spaceships in science fiction films, covered in pipes, grooves, panels, widgets, dishes...

a Luton sky, but the computerised version could have the shine of Eldorado or the glimmer of Mithril, it could take a Death Valley dawn and merge it with a Canaletto sunset – the results varied, but those seductive oily sheens must have shaped a few decisions in the minds of clients and funding bodies.

But what can model-making donate to architecture? There's one concept that I hope might spread into the profession. It came to mind when I saw the renders of Heather-BIG's Google HQ for King's Cross, and photos of COBE's transformation of a grain silo in Copenhagen. The Google landscraper has a very long street frontage, and on the renders it looks like there's a lot of activity there: some shops, yes, but also a good number of bulges, pods, boxes and recesses that could be anything. Meanwhile COBE's silo is a remarkably featureless concrete box given a busy faceted facade of windows and balconies through the addition of galvanised steel modules.

The word that occurred both times is a fine one: Greebling. 'Greebles' are the model-maker's word for the functionless details that are added to a large, plain volume to give it a sense of scale. Think of the giant spaceships in science fiction films, covered in pipes, grooves, panels, widgets, dishes, none clearly identified but all giving an impression of vastness, importance and complexity. Did the Bjarkewick nodules and vitrines for Google have assigned purpose, I wondered, or were they just greebles to make the immense street front look more interesting than it would prove to be? And though COBE's additions to the Copenhagen silo had purpose, they were also energetically faceted and angled and different, as if in (over-?)reaction to the blank orthogonality of the underlying structure: they were somewhat greebley.

In my second novel, I used the hard, cryptic cladding of a modern hotel as a metaphor for the opaque corporate structures within. That was 2014 – today that hotel would likely be clad in brick panels. The pendulum has swung against the silken facades of the noughties and back towards the detail and decoration insisted upon by the counter-modernists. Brick, once structure, is now mostly no more than a surface treatment to be affixed to a concrete frame. That's not a bad thing, but it needs a name. The sheen age is over – the age of greebling has arrived.

Will Wiles is a journalist and author. Read him here every other month and at ribaj.com

JUNK ON THE ROOF

The computer game SimCity 4 (2003) has endured remarkably well, in part because of an energetic community of 'modders', who are still making new buildings for it. Because the game presents an isometric top-down view of a city, you get to see a lot of roofs in play - and as a charming result, the modders are connoisseurs of what they call "roof junk", giving airconditioning units, ducts and stained weatherproof felt as much attention and realism as any terracotta or marble details on a facade.

Incoming President Ben Derbyshire is planning for Brexit and wants to showcase the UK's housing design skills

Words: Hugh Pearman Portrait: Ivan Jones

Brave new world

Right Ben Derbyshire plans a Housing Expo for 2019, Brexit year.

Ben Derbyshire has just moved office. After years in Camden Town, with his housing specialist practice HTA growing, he has moved east to Aldgate, to the top floor of one of the fine 1930s Co-operative Wholesale Society buildings there. They considered taking a larger floor but caution prevailed: 'Post-Brexit, what do you do?' he says.

So it's a busy scene – HTA Design LLP, evolved from the original community-minded practice Hunt Thompson, has up to 180 people in its London office, another 20 in Edinburgh, half a dozen in Manchester and a fledgling Bristol office. Its 300% growth since a management buyout in 2013 has been steered by Derbyshire: this is someone who knows how to make a success of a business and who grew up steeped in ambitious architecture. His father, the late Sir Andrew Derbyshire, led RMJM in its glory days and was also very active in the RIBA.

'I can't be downhearted about Brexit,' he says. He's clear that he represents all members, those in favour of leave and remain. Besides, he'd rather talk about the opportunities presented by Britain's leaving the EU. Given that parts of the UK have a housing crisis, but that we are known internationally for our skill in housing design, he thinks it's time to make a big show.

So he's in the early stages of planning a 'Housing Expo' to take place in Brexit year, 2019, 'which will show what we as a country can do. We can have global leadership in housing provision'. What form will this expo take Derbyshire can't yet say - though previously he has spoken of opening up to the public hundreds of new housing sites to show what good design looks like - but he's gathering influential support. 'We've got a really promising reaction from the Greater London Authority. I don't want to say too much but it's an ambitious idea and for the RIBA it's particularly relevant to participate because it's very outward-facing and can and will engage the membership a lot.'

Isn't that very London-centric, though, involving other capital-based organisations





Architects are a passionate lot. We need to channel that enthusiasm to enrich the output of the institute

such as New London Architecture? 'It's Londonish at the moment but once we've worked through the template in London we see no reason not to roll it out further afield. It's a collaboration and it does require political support. That's the number one hurdle.'

If we're talking a lot about housing it's not just because of Derbyshire's expertise in this area. It's because of the way housing affects everything else. Inevitably we come to the aftermath of the Grenfell Tower fire tragedy.

'Who in their worst nightmare would have imagined waking up on that Wednesday morning to such terrible scenes of devastation, suffering and grief,' says Derbyshire. 'It has, I think, an impact which will be completely pivotal in the way in which we see and understand the application of standards and the provision of housing. So it's an incredibly significant moment.

'It's completely out of order to speculate ahead of the outcome of the public inquiry, and it's not a moment to be using misery to get vested interests across. Things are definitely going to change. I think the responses made by the RIBA were timely: the need for a public inquiry, questions about supervision, procurement, complexity of standards. We should collaborate across the industry. I think government needs one voice.'

Given the time and energy it requires, why did Derbyshire want to be President of the RIBA? 'The profession in my view has been subject to a fairly continuous slide in its influence and its fortunes over the last 30 years and as I come towards the end of my active career I thought, what to do in order to give something back? I cast around for how and where to do that, lighting upon the RIBA with its tremendous brand, its very considerable resources and its huge membership of 43,000. I thought, that's the place to go to make my contribution to some of the changes I think are necessary in order to start to reverse that long-term trend.'

He's only 64, and with his shock of swept-



Above Derbyshire takes over a drafting table in his Aldgate office.

back hair and designer specs looks younger. He has no intention of relinquishing practice 'until I retire completely sometime in my early 70s'. He believes it's important for the President to be an active practitioner. Some of the institutional changes he wants should flow from others in practice, he says. 'Architects are a passionate lot. The challenge is to engage with that passion, and to create channels by means of which that enthusiasm can enrich the output of the institute.'

This is not just a Portland Place shift. 'I'm very keen on the role of the societies of architecture wherever their markets operate throughout the country and internationally. I see a network of thriving societies of architects – a rich mix of diversity that should find its way into our cultural output much more than at the moment.

'I don't see architects as passive or reluctant to contribute at all, and championing what they do is an important part of our purpose.' The rebuild of the institute's website to be much more navigable and useful, a task now in progress, is a vital part of that.

He has been travelling the country giving 'FutuRIBA' seminars, reported online. 'Overwhelmingly I've found encouragement and support for my change-is-neces-

sary theme. In London people are calling for a richer, more diverse, more attractive output from the institute, and freer access to the 'house' in Portland Place. They want a place, they want a club. Somewhere to be with their clients and collaborators which is much more available. Elsewhere, it's 'what's the value of our sub, how come it all goes to London?' There's a very palpable sense that people enjoy the support of our regional structure—it's hugely effective and supportive, and they want more of that, and they want more local autonomy in order to make those thriving local societies work well.'

One concern unites everyone: 'The big lesson for me is about training, access to qualification. That should really be a central preoccupation for me and the institute. The time and cost involved is a deterrent to our making a more diverse profession. Economically disadvantaged people find that a real obstacle. And people are saying that the training should be more relevant to their needs as practitioners.'

Diversity is central to his task, a lot of which will be about 'rejuvenating, diversifying and enlarging the membership', internationally as well as at home. He notes that membership is rising already. He sees the future as a global network of architectural excellence focused on the RIBA. But no complacency. 'As Norman Foster would say, change is the only constant.'

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The secret round the corner

Even if you think you know every interesting building in London, do you know where they are? This app will change your walk to work

Bob Ghosh

Digital guides are an invaluable resource in navigating modern cities. Most mainstream guides might have an 'architecture' section, which cherry-picks landmark buildings or projects by famous architects. But apart from enthusiasts, few people have time or inclination to locate more obscure places of interest.

A few years ago, a client and I attended a meeting at an unremarkable office building in Hammersmith. When we came out, deep in conversation, we took the wrong turning and stumbled across Rogers Stirk Harbour's Stirling Prize-winning Maggie's Centre at Charing Cross Hospital, an immediately recognisable architectural gem. Sometimes, the incidental can be a truly joyful experience.

People tend to build a mental map of places, which is based on their own experiences, but sometimes unable to connect different locations, which could be quite close. For example, it took me ages to figure out that you could walk between King's Cross, St Pancras and Euston in a few minutes, as I'd only ever approached them from below ground.

The Architecture Foundation's London Architecture Guide is an innovative and user-friendly tool which offers an insight into some of London's finest buildings and spaces, with a well-considered balance of historic assets and more recent ones. The range of projects is immense, from one-off Voysey









Expect to find unexpected pleasures with the London Architecture Guide app on your phone.

houses to whole GLC estates.

The app incorporates over 1,100 buildings, each illustrated with photographs and critical text. All entries can be GPS co-ordinated and quickly filtered by proximity, architect, building type and architectural era. One click then connects you to Apple maps and offers real time walking directions. The 'nearby' function also identifies other entries in close proximity, which may be around the corner.

The new digital platform expands on existing research by architects Edward Jones (Dixon Jones) and Christopher Woodward, who authored the original print editions of the Guide to the Architecture of London.

Using the app, what first strikes me is that, like the Tube, most things in London happen to the north of the river, with the vast concentration of entries located there. These appear as small blue dots on a scaleable background map. When you zoom in, a small thumbnail appears, which is clicked on to open the entry. Itself this is graphically clear, but at certain scales, it can be difficult to differentiate between the blue dots and smaller bodies of water.

From reading the credits, its unclear how the list is put together or how buildings were selected, and whether this is influenced by the architects themselves. Although the Architecture Foundation publicity states that buildings will be added each year as projects complete, there are some omissions. For example, the aforementioned Maggie's Centre does not show in the guide and nor does the award-winning Brentford Lock West, among others.

However, these are small criticisms of an otherwise excellent resource, which is free to download (iOS only) from the App Store. Sponsorship by real estate fund advisor Brockton Capital has helped keep it free to access.

So, who is it for?

Architectural anoraks like me will relish this tool and no doubt more tech-savvy students of architecture will use it to its full capacity. As well as the mapping function, it has a diary of events and writings on each of the eras covered. If the content can continue to grow I'd like to see one for other cities such as Birmingham, Bristol, Leeds, Liverpool and Manchester.

I would like to think that the app will become a more mainstream resource for use by regular Londoners, day-trippers and overseas tourists alike. I will certainly use it whenever I'm in London, so to avoid missing out on a bit of inspiration which I otherwise would.

Bob Ghosh is director of K4 Architects

The app incorporates over 1,100 buildings, each illustrated with photographs and critical text

Fun with brutalism

HKPA's playful take on modernism shines bright in this Twentieth Century series volume

Otto Saumarez Smith

Howell Killick Partridge and Amis (HKPA), idiosyncratic concrete connoisseurs of the post-war period, is the latest architect to get the Twentieth Century Architects treatment. This terrific set of books, masterminded by the Twentieth Century Society, is blasting apart lazy assumptions about the architecture of the period as being subsumed into dreariness by modernist dogma. Instead, post-war Britain is seen as a country that blended a rich range of flavours, of which HKPA must surely be one of the more piquant.

The first chapter explains the complex dynamics of the partnership. Each partner oversaw individual compositions, yet the finished product was the result of a shared aesthetic and a collaborative approach. The firm's incubation occurred while working at the London County Council Architect's Department, designing a British summation of Le Corbusier's still fresh Unité d'habitation conception at the Alton West estate. What this misses in Mediterranean magic, it makes up for in its pictures que deployment of rolling Richmond Park. The firm got its initial blastoff coming second in the competition to design Churchill College, Cambridge, a scheme gorgeously evoked in Barbara Jones's renderings.

From this came a series of projects for Oxford and Cambridge colleges. Along with a number of its contemporaries, most notably Powell and Moya, being confronted by the weight of history and the snobbish strictures of these ancient universities helped occasion an expansion of purview in nominal modernists. HKPA's buildings in Oxford and Cambridge, while still clearly defined by a robust sixties aesthetic, are nevertheless inventive and playful additions to a collegiate tradition. In Oxford there were two partially realised master plans, for St Anne's and St



Above The dining hall of the Hilda Besse building at St Antony's College Oxford.

Antony's, where the Hilda Besse building composed of elaborately interconnecting structural components created a series of ingeniously interpenetrating spaces.

The Cambridge University Centre achieves a similar effect on a larger scale, with disparate elements of structure and space thrillingly woven together. At Darwin College, Cambridge, new forms were plugged into the gaps along an existing streetscape, resulting in a perimeter block preserving the college's Victorian gardens and river frontage. An equally subtle addition to an important site was the new senior combination room at William Wilkins' Greek Revival Downing College, Cambridge. It is the smallest, but also the most perfect, of HKPA's remarkable run of Oxbridge projects. Non-Oxbridge higher education projects from this period include the University of Birmingham's Ashley Building and the University of Reading's thrillingly trabeated mini-megastructure.

Towards the end of the 1960s big institutional projects began to dry up and in 1974, Bill Howell, the most exuberantly talented of the four, died in a car crash. The latter half of HKPA's career is harder to celebrate, but this book allows us to explore many intriguing buildings which continued to be designed and built. The firm's dramatic temperament made it the ideal designer of a run of theatres, including the Young Vic, Christ's Hospital, Regent's Park and Deptford's Albany. These swapped an aesthetic of permanence for one of lightweight indeterminism. The last chapter, 'Law and order', focuses on the many courtrooms and prisons which became a mainstay of the practice's work.

The quality that shines out most clearly from this excellent survey is the joyful pleasure the quartet took in the business of architecture. Their buildings result from a happy mixture of a magpie approach to historical influences, a theatrical sense of the potentials of expressed structure, sensitivity to detailing and materials, and a deeply sympatico outlook on users, clients and briefs. The firm might well be categorised as brutalist by dint of its milieu, but the thuggish connotations of the word should not obscure the immense fun that is palpable in each building's design. These qualities are all admirably brought out in Geraint Franklin's succinct, richly illustrated, and elegantly constructed survey.

Otto Saumarez Smith is Shuffrey junior research fellow at Lincoln College, Oxford

HKPA's buildings in Oxbridge, while still clearly defined by a robust sixties aesthetic, are inventive and playful additions to a recognisably collegiate tradition



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Richard Gilbert Scott 1923 – 2017

Member of the famous architectural dynasty who emphasized human scale and the value of space, particularly known for his churches, City schemes and Blue Circle HQ



Richard Gilbert Scott, who has died at the age of 93, represented the fourth generation of England's greatest architectural dynasty. After training at the Bartlett and the Regent Street Poly, during which wartime service intervened, Scott worked for his father, the firm becoming Sir Giles Scott, Son & Partner. Com-

missions for Roman Catholic churches in Birmingham inherited from his uncle, Adrian Gilbert Scott, enabled Scott to get away from his father's influence. Both the Churches of Our Lady Help of Christians at Tile Cross (1966-67) and St Thomas More at Sheldon (1968-69) are remarkable, innovative designs, now listed. Scott's extensive work at the Guildhall for the City Corporation - the Basinghall Street building (1966-69), the Library wing (1969-74) and the Art Gallery (completed 1999) was an inheritance from his father, in which his Gothic sensibility is evident. Scott designed boarding houses for Charterhouse School (1971-74) and the lakeside offices for Blue Circle Cement at Aldermaston (1983-86), a particular favourite. Scott's playful modernism, infused with traditional architectural values, has long been unfashionable and misunderstood, and ought now to receive the respect it deserves. Like his father, Dickie Scott was also a keen and accomplished golfer.

Gavin Stamp

My father was preoccupied with 'human scale', counselling me always to put people in my drawings, to create a sympathy between these figures and the forms and spaces they inhabit. When we were young, because of his interest in Corbusier's Modulor, and Corb's buildings, he would use our bodies to measure height, arm reach, etc. Much discussion was had about Corb's idealised 1,830mm tall figure: he visualised the proportions of the Golden Section everywhere.

He told me that 'the space' was the most important

consideration in his architecture, and he inherited his father Giles' desire to create beautiful spaces. Particularly good examples of this in his work are Tile Cross Church in Birmingham and the area around Old Guildhall and St Lawrence Jewry. Here, the openness frees the old building, emphasizing the space around it and creating a generous public piazza. His exuberant buildings respected the medieval scale of the Guildhall itself. And at Tile Cross Church a dynamic central space thrusts upward towards the light, enriched by John Chrestien's colourful stained glass. Working there as a steel fixer's mate in my teens I was impressed by the amount of high quality carpentry in the plywood shuttering for the complex reinforced concrete roof, very challenging for the contractor.

In another use of space, Blue Circle headquarters at Aldermaston was created as part of a lakeside scene. A large modern concrete building, it meanders sensitively in this romantic setting, adding to rather than disturbing the peace of the landscape, and evoking imagery of eastern pavilions emerging from the woodland and reflected in the lake. It was probably my father's favourite building, but needs protection as it is now under threat.

My father's own home in Norfolk, Meg's Cottage, is an intimate unfolding experience of overlapping walled garden spaces and buildings, with entrances, thresholds and overhangs, a richness that reminds me of Shinto shrines.

I worked with my father on the design of the new houses at Charterhouse School, breaking down the scale by creating 'clusters' which could be freely arranged to fit in among and between the trees of this wooded margin to playing fields. Something was owed here to the work of Stout & Litchfield, with whom I had worked earlier.

Dad was not dogmatic about architectural style and was responsive to the unique circumstances of each project. However, unusually for his generation, he inherited a fluency in Gothic from his father. At St Marks, Biggin Hill, his perpendicular mullions expressed this convincingly, and at Guildhall Art Gallery he re-iterated it. The West Wing, with its use of closely repeated vertical mullions and dancing canopy forms expressed this language in a more modern style.

Nick Gilbert Scott

IN MEMORIAM

CATHARINE ANN FORTLAGE ELECTED 1953, TAUNTON, SOMERSET

ALFRED STANLEY HAMILTON ELECTED 1957, EASTBOURNE

DEREK ADRIAN SAKOL ELECTED 1979, WORCESTER

COLIN STEPHEN CAVEELECTED 1985. LONDON

RAPHAEL CASANOVAS ELECTED 1984, CAMBRIDGE

BERYL JEFFERY ELECTED 1950, LONDON

KENNETH EDWARD BOX

ELECTED 1953, LONDON

PATRICK NAPIER CAMPBELL-JONES ELECTED LONDON 1954

MICHAEL RAYMOND LLOYD ELECTED 1954, ALICANTE, SPAIN

GEOFFREY GARTH THORNTON ELECTED 1956, WELLINGTON, NZ

KAITHAVALAPIL GOVINDAN SUKUMARAN ELECTED 1960, KERALA, INDIA

BARBU ARMAND CALINESCU

RICHARD STUART WILKINSON

FREDERICK JAMES GARY HARPER FLECTED 1970, CORNWALL

ROGER JOHN EARL ELECTED 1983, LANCASHIRE

JOHN KIERON BARRY ELECTED 2008, DUBLIN

REMO GRANELLI ELECTED 1958, BIRMINGHAM

COLIN MORSE ELECTED 1958, SURREY

CHRISTOPHER NIGEL LAMBERT ELECTED 1955. EXETER

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Interior of Birmingham Tile Cross Church.

Exchange

After Grenfell: unrest or status quo?

The final chapter of Le Corbusier's Vers Une Architecture is titled 'Architecture or Revolution'. Soon after the Grenfell Tower disaster, I predicted a public response of civil unrest. I believe this was a reasonable expectation.

The fire is probably the worst thing to have happened to London in 75 years. We are told by independent experts that the disaster was avoidable, predictable even.

We can all see the aesthetic evidence of local authority housing departments' 'cost-in-use' procedure, used to justify their specification of only the cheapest of the cheap. Look at the awful low quality uPVC windows still being installed on social housing across the UK.

I know of an estate in south London, where the residents of 26 flats have reported conditions that the local authority's own surveyor has deemed to be, in his own words: 'very dangerous'. Yet the housing department in question has turned away the complainants for nearly three years now, with fob-off, push-back and denial. The local authority knows that to rectify these problems would be costly; so the residents are treated appallingly and continue to live in conditions that the local authority knows to be dangerous. The Member of Parliament, who has been approached by the residents for help, appears to have surprisingly limited powers to intervene.

Much of the rioting of the four major 'Notting Hill riots' since the 1950's took place around Notting Dale, in streets close to the site of the tower. I expected unrest. I was wrong. There has been some shouting from Grenfell residents at the subsequent Kensington & Chelsea council meetings,



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Your issue of 20 June reporting consent to the works at the Burrell Collection, Glasgow (Intelligence: Page of consents: latest approvals by Jan-Carlos Kucharek https:// www.ribaj.com/intelligence/page-of-consents-20-june) quoted me completely out of context and in doing so misrepresented the views of the Twentieth Century Society. The article said 'Claire(sic)Price...called the whole "necessary and acceptable".' This phrase was lifted from the following $sentence\ in\ our\ formal\ response\ to\ the\ local$ authority, which said in full: 'Following prolonged discussion and modifications to the scheme, the Society consider the majority of the proposals to be necessary and acceptable: but with the critical exception of the addition of the new entrance and revised circulation which will impact heavily on

considers that this is not the correct solution for this well-loved and fine building.'

The Twentieth Century Society London

but little in the way of civil disorder. Maybe there's a belief that the disaster was so devastating that it will simply be impossible for it not to result in huge changes to social housing policy. Let's see.

Nick Coombe, London

Welsh regulations are different

The author of 'How Europe does it' (RIBA) August 2017) is under the impression that the building regulation regime of Wales and England are the same.

For some time the Building Regulations have been devolved to the Welsh Assembly, and a Welsh version of Approved Document B1 and B2 has been in force since 2007.

You will therefore be surprised to discover there since January 2016 there has been a requirement in those regulations that all new Building Regulation applications will have to have a 'fire suppression system' installed in all dwellings and 'all new premises of Purpose Groups 1a, 1b, 1c, 2a and 2b with the exception of hospitals, hotels, prisons, and short stay hostels used for leisure purposes'.

Geraint Efans, Caernarfon

Tweetback

Lots of comment on our Eye Line drawing competition with AVR London, including this exchange with the winner:

Matthew Kernan @mkernan22

Wow. Delighted to have been selected as winner out of some amazing entries! Great way to end my time at @ OUBarch!Thanks very much!! @RIBAJ

AdamNathanielFurman @Furmadamadam Is the Eyeline winner a watercolour painting?

Matthew Kernan Completed through autocad and photoshop!

AdamNathanielFurman V heautiful

And readers responded to our review of a new book on uber-brutalist HKPA, showing its office:

Historic England @HistoricEngland HKPA: Fun with brutalism via @RIBAJ

Bob Walton @WaltonBob A ubiquitous architects' office with Chinese lantern & rubber plant.

Historic England Yes! Could be 1960s, could be 2010s...

And Jane Duncan's presidential sign-off tackled the Grenfell aftermath: Liz Peace @lizneaceCBE Spot on - we need to rethink the role of - and route of procurement for - social housing!

Burrell comments out of context

the important Hutton Rooms.'

The letter continued: 'The Society

Clare Price, senior conservation adviser

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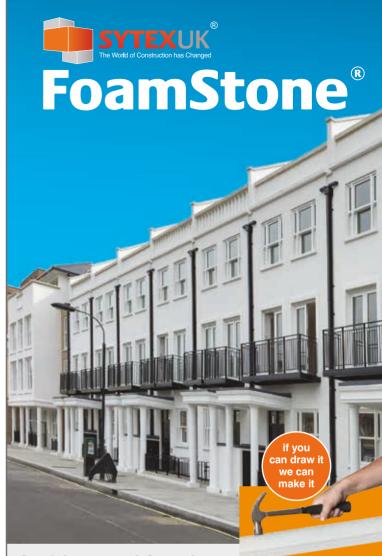
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Electricity Showroom, Regent Street, London (1938) 1971-1981

Not many know of the contribution given to British architecture by the great Bauhaus artist László Moholy-Nagy during his two-year stay in the country in the mid-1930s. Following his friend Walter Gropius to London in 1935, he first found work as a graphic designer but soon started collaborating with some of the most prominent architects of the time, especially other fellow émigrés and members of the MARS group.

After a couple of opportunities to work with Ernö Goldfinger failed to materialise, Moholy designed an exhibition stand with Marcel Breuer, created photo-murals

for the Electricity Showrooms designed by Fry & Gropius, and, most importantly, left his mark on the planning of the greatly influential MARS exhibition of 1938. The Architectural Review commissioned him to design and illustrate a special feature on 'The English at the Seaside', and Leslie Martin invited him to lecture at his newly-founded school of architecture in Hull. Following Gropius again, Moholy left Britain for the United States exactly 80 years ago, in 1937: 'England's loss is America's gain', commented the AR on his departure. •

Valeria Carullo

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

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