

**Eye Line: drawings of power and passion**  
**Steyn Studio's café beds into the garden**  
**Low-tech design must be the starting point**







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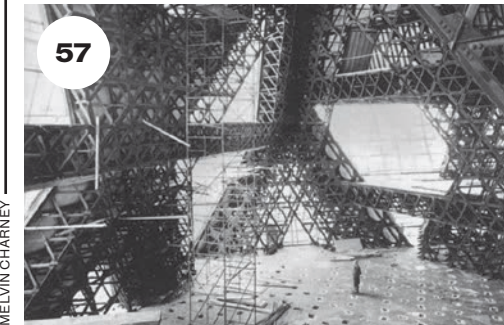
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**On the cover**  
The Kitchen by Andrew Riddell, Eye Line 3rd winner, student



Magical drawings, the rise of low-tech, plus homes, museum and gardens. Make your contribution: [letters.ribaj@riba.org](mailto:letters.ribaj@riba.org)

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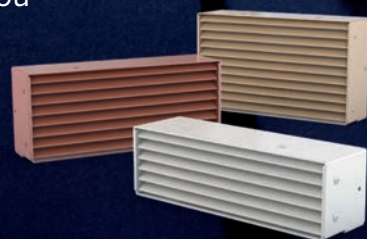


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Lyn Davies  
Business Development Manager, Nuaire.

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— Museum of Making  
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05

# 1: Buildings

THE AUTHOR'S HOUSE  
JUTLAND, DENMARK  
SLETH

Read the full story by Morten Birk  
Jørgensen: [ribaj.com/authors-house](https://ribaj.com/authors-house)

Building in picturesque Danish landscapes is not free play. Comprehensive regulations are designed to preserve what is left of open space in this small and highly-populated country. The Author's House is a new home for a writer near Aarhus on the east coast of the Jutland peninsula, designed by Danish practice SLETH. Its planning listing allowed only a reiteration of the small house that was already there.

But this is no ordinary home. The author comes here every day to work, to get inspired, to think, read and write. It is her workspace, a comforting writing sanctuary with the opportunity for sporadic sleepovers. Materially it explains itself in copper, concrete and timber with some splashes of Yves Klein blue. It is primarily living space, with the option of taking a coffee and working on every surface while enveloped by views of the forest. Bedrooms take a back seat. There are not really walls – only bookcases. The building is evolving, changing by the season as the copper patinates and settles, becoming a small example of its use in a distinguished Danish architectural history.

Inside, the smells of the forest continue in the apexed, timber-lined space, in a robust and delicately designed interior that exhibits the craftsmanship of its making. A workshop for DIY repair is not necessary here – the architect is conferred and a skilled professional is engaged. But does the house really engage with nature as it is proclaimed, propelling the genre of contemporary architecture forward like so many of SLETH's other projects? Or does it offer a model for something else? And as a place to produce books, what kind would it be if it was one itself? ●



[ribaj.com](https://ribaj.com)

The RIBA Journal August 2021

RASMUS HJORTSHØJ



# Altogether now

Stolon Studio's latest example of 'sociable housing', Penrose Mews, offers a compact community setting unusual for the well-heeled west London residents it accommodates

Words: Isabelle Priest Photographs: Tim Crocker



South London practice Stolon Studio has completed several projects that it labels 'sociable housing'. The first was Forest Mews, a grey brick development of three live/work houses, one of which was for practice directors Robert and Jessica Barker. You may have seen another, Kaolin Court, in the RIBA Awards shortlists last year with its rain chains and red clay tiled facades. The self-named building type has become a speciality for Stolon. Information about sociable housing is everywhere on its website, while over the past year its directors have been accumulating evidence to send to journalists about how successful the model has been during lockdown.

The key idea of 'sociable housing' is to create infill urban homes around a communal courtyard. The concept is not new, but the labelling is. Residents are supposed to chat to each other while sheltering under their front door canopies, have barbecues in the yard together or, as the firm has been keen to advertise, let their kids out at the same time, turning the central space into a private secure playground – a boon during home-schooling. The benefits from having like-minded, close neighbours is the pivotal point. It all sounds quite cosy and left-wing doesn't it? It may be

one step to the centre from co-housing. Or maybe you trip over the words and are somewhat led to assume it is some kind of social housing – an easy mistake to make.

Imagine the surprise then, when you turn up at Stolon's latest sociable housing scheme, Penrose Mews, just off Lillie Road in Fulham, to learn this is not a cosy development providing solutions to the housing and loneliness crisis one small perfectly formed affordable home at a time, but in fact, a high-end, lock-and-leave-able gated community occupied by, among others, a professional footballer, a former CFO of a major furniture company and a couple who sweetly acknowledged that they moved from near Wembley after 'our fortunes changed'. Armed with this knowledge, a differently tinted light shines across the scheme. But the first point, as you cross under the 'gatehouse' – one of two passageways from the street into the courtyard – and pass by the ubiquitous storage lockers and bike racks is that even the wealthy do not live well in London. Has Penrose Mews got me feeling sorry for a footballer?

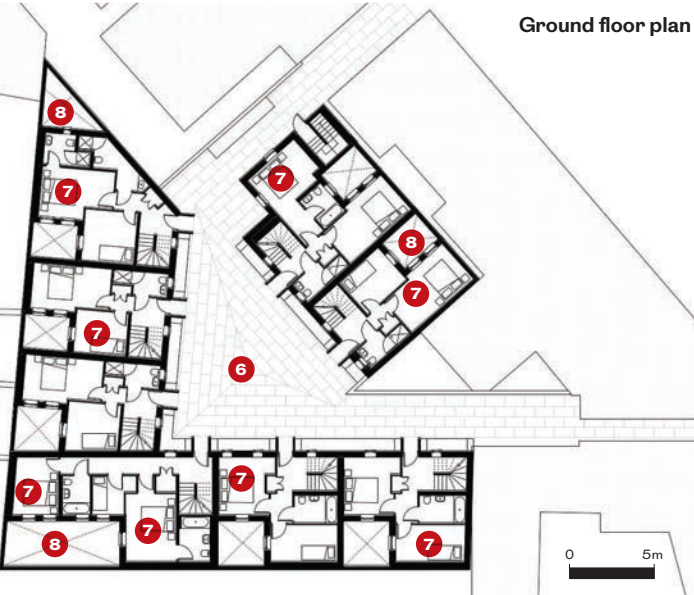
Not too sorry. Penrose Mews is the brainchild of Crane Investments. Aprajay Patel from the family firm meets me on site with



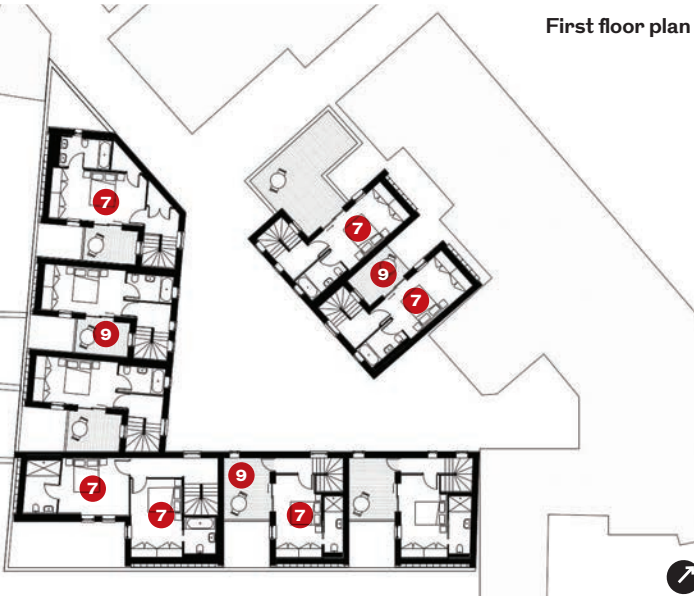




Basement floor plan



Ground floor plan



First floor plan

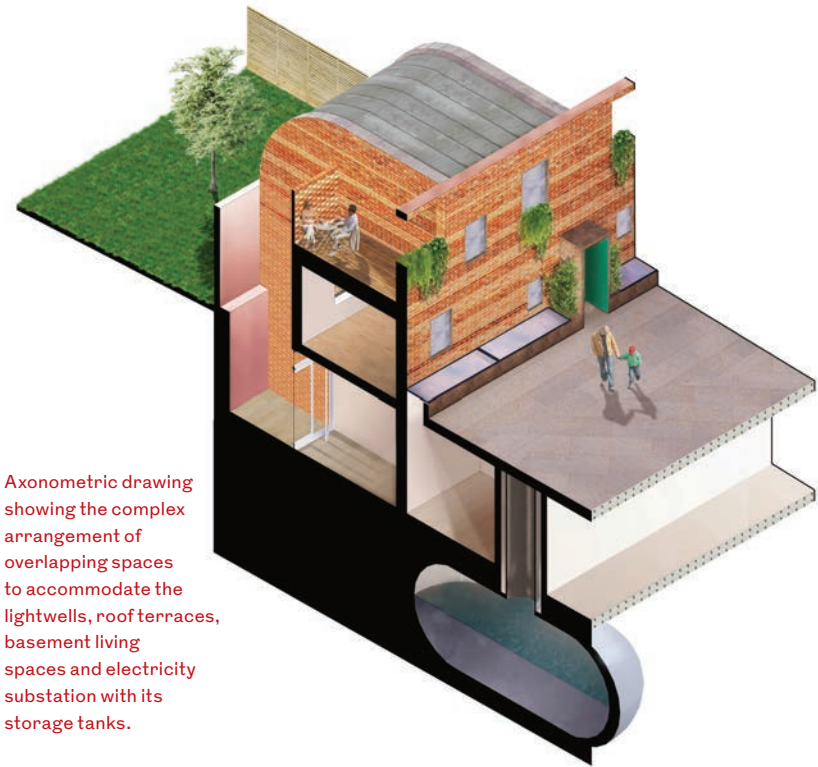
Axonometric drawing showing the complex arrangement of overlapping spaces to accommodate the lightwells, roof terraces, basement living spaces and electricity substation with its storage tanks.

- 1 Electricity substation
- 2 Living space
- 3 Kitchen
- 4 Plant
- 5 Private courtyard
- 6 Communal courtyard
- 7 Bedroom
- 8 Void
- 9 Roof terrace

Credits  
**Client** Crane Investments  
**Key dates**  
Start on site: Feb 2018.  
Completion: Aug 2020  
**Architect** Stolon Studio  
**Structural engineer** StructureHaus  
**Mechanical & electrical** Prospero Projects  
**Cost consultant** Pulse Consulting  
**Landscape design** Stolon Studio  
**Interior design** Stolon Studio  
**Drainage engineer** StructureHaus  
**Main contractor** Engel Construction  
**Key subcontractor** Curtis Metal Designs

architect Robert Barker. Crane bought the backland triangular site in 2013/4 for £2 million when it was occupied by design company Seymourpowell with workshops on the ground floor and offices above. Patel then leased it back for a couple of years. Stolon had to find 900m<sup>2</sup> of residential footprint to make the scheme work; it managed 975m<sup>2</sup>. The development creates nine homes: eight red brick terraces and a maisonette above the gateway. It is entirely rented and doesn't include any affordable homes because it is below the 'magic number' that would trigger that requirement. The scheme cost £4,500/m<sup>2</sup>, which includes relocating an electricity substation, but is generous for housing. Koalin Court was £2,726/m<sup>2</sup>. The money at Penrose Mews – so named for its 'impossibility in its purest form' – is sunk into a vast basement that spans the site and makes the scheme possible by putting all living spaces into it, and into necessities and logistics like moving the substation and 37 party wall agreements. Not all developers would take this on.

Coming through the tunnel, we are dealing with a courtyard of charming small houses that cling to the plot perimeter. They butt to the boundary, tucking in behind a 1990s development of semis on one side; the four-storey rear of Lillie Road's Victorian parade towers above another. The houses range in size from 109m<sup>2</sup> to 156m<sup>2</sup>, but appear as two-up, two-downs. Immediately you would associate the architecture more with Peter Barber's north London work. When I visit, the all-paved courtyard is empty except for a maintenance man milling about, but it is



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Windows are scattered whimsically across the otherwise flat facades

**Left** The rear of Lillie Road's Victorian parade pokes up beyond the top of two of the new houses.

**Right** Bands of glazed bricks get broader as they move up the front elevations.

a Tuesday morning. The houses are defined by their entrance porches – extruded forward boxes, differently coloured inside, each with their own spotlight, one of the cutest features. Windows are scattered whimsically across the otherwise flat facades, some glazed, others open for roof terraces you can't tell are there. The houses appear to blend; you couldn't easily mark where one ends and another begins. Around the courtyard wall are ground-level rooflights with tall upstands that let light into the basements and act as a 'defensible moat', enhancing privacy in ground-floor bedrooms.

The formula inside is living space in the basement, kitchens under the communal courtyard, eking space out around the substation sited at the centre. Living spaces open on to at least one private circa 10m<sup>2</sup> sunken lightwell courtyard. Each house is different, contorting to fit the site, although the overall footprint broadly follows the workshop buildings that were already there. The houses are three-bedroom, except the corner one which has 4.5. It's also the only one without a roof terrace, though its basement courtyard

is longer. Internal floor finishes include concrete-effect large-format tiles in the living spaces and timber engineered flooring that changes from natural finish in hall space to grey-washed in the bedrooms. Kitchens vary – some are charcoal grey with rose-tinted mirror splashbacks, others white-fronted. Bathrooms have quirky bulbous brick tiles.

Crane Investments has gone the extra mile on certain aspects, like ensuring ceiling heights of 3.1m in the basement and 2.5m upstairs. Roofs curve away from the communal courtyard, with fitted wardrobes and shower rooms squeezed into eaves. Specially glazed bricks on main elevations provide additional variation to the hit-and-miss bricks as well as enhancing reflectivity and lustre. The development is supplied by air source heat pumps strung up along the wall of the second access passage. A gantry crane is installed as part of the deal with UK Power Networks for the 4-tonne substation machinery that gives a rawer industrial feel to one corner of the courtyard. The site is car-free, but Patel negotiated with the council for one on-street parking permit per house, which is increasingly unusual.

Unsurprisingly, more residents are international than usual, even in London – in spite of Brexit and coronavirus, which became worries during this long project. Patel says people are attracted to live here because it creates a community. There are evident drawbacks to this too; although there are lightwells, views out of the windows are in on itself – to the courtyard or development walls. It's a necessity because of how constricted the site is, but it's a slightly claustrophobic compromise for high-end housing. Patel fully

acknowledges the lack of views, and says you get privacy in its place, which you do from the street, but you are geographically and psychologically very close to your immediate neighbours – the courtyard leaves only circa 10m between houses in the corner of the triangle and there is overlooking that way. Problem is, while visiting, you can't really shake the feeling that the price point doesn't marry up with your architectural expectations. Even though the development is interesting architecturally, complex, a labour of love and worth the efforts in so many ways, the expenditure is not evident in the quality of life it provides. If London's property boom continues, perhaps in a decade's time it will. ●

**Left** Basement kitchen and dining area of corner house, showing longer courtyard.

**Below** Living space and 10m<sup>2</sup> courtyard in more typical house.



TAYLOR MAXWELL

# Riverside House

Riverside House in Salford, a four storey, 11,000 sq. ft office building, has undergone an extensive redevelopment. **Alford Hall Monaghan Morris** (AHMM) architects designed the refurbishment, which included the restoration of the 19th century brick facade and the construction of a new office building adjacent to the existing structure.

The original building is a great example of Victorian Gothic architecture, previously operating as the Royal Veteran Tavern before it fell into a state of disrepair and dilapidation. Considerable care was taken to restore the historic features of the existing facade. The new structure was cleverly designed to blend harmoniously, incorporating period features such as large window arches, with a contemporary twist in the use of more modern materials and colour palette.

Taylor Maxwell were pleased to work with AHMM and appointed contractor **Bardsley Construction** to specify and supply the facing and special shaped bricks for the new structure of the Riverside House development.

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Image Credit: ©Alex Upton Photography



# Mill gets back to work

Regeneration of Derwent Valley's heritage continues with Bauman Lyons' Museum of Making, an interactive and practical project that keeps industrial creativity alive

Words: Hugh Pearman Photographs: Nick Dearden



The Civic Hall or entrance atrium to the museum with a café and stairs rising to the museum shop and main exhibition galleries. A Rolls-Royce Trent jet engine dominates the space.

## Buildings Museum

Section through Civic Hall entrance atrium.



Section A-A

The Industrial Revolution is said to have started here, in the early 18th century in what was originally Derby Silk Mill. Supposedly the first British water-powered factory organised on modern lines, it had a sequence of processes from raw material to finished product. The chain of Derwent Valley mills in Derbyshire that runs north from here has Unesco World Heritage status. As the southern gateway to this 15-mile linear site, following an earlier incarnation as an ad-hoc industrial museum and a long period of closure, the mill has been reborn as the expanded Museum of Making. The National Heritage Lottery Fund is the majority funder.

The red brick building you see today is mostly Edwardian and later, though from the riverside path you can still make out the shallow arches of the original silk mill foundations, designed to allow flood water to swirl through when the building was on an island in the since-narrowed river. Floods are commonplace so the new museum had to be designed to shrug them off: you'll never be able to keep the water out in extreme conditions, so the fit-out here makes it relatively straightforward to recover from. The ground floor level is slightly raised, impervious materials are used up to a certain height and sometimes beyond: it helps that the overall aesthetic is industrial anyway. This also explains why the main exhibition sequence of the museum starts on the first floor.

A triple height atrium grafted onto the side of the existing building serves as the arrival and circulation point. A grand



The former Derby Silk Mill with its tower has expanded sideways with its new Civic Hall and upwards with a glazed belvedere called The View.





**Above** The third floor temporary exhibitions gallery, here in 'black box' mode but able to have its rooflights and windows revealed.



**Below** Ground floor catered events space and temporary gallery called The Italian Mill.

raw-steel staircase (plus lift) takes you to the first floor, where you will also find the museum shop. That, combined with some judicious knocking-through of the spaces in the mill, makes for a reasonably clear route round this L-shaped museum. The entrance hall supplies an introduction to the collection, with objects arranged along the left hand wall as you enter and continuing up the stairs. And of course it also provides space for a decent café/restaurant.

It seems incredible now, but there used to be a coal-fired power station between Derby's nearby cathedral (as a former parish church much rebuilt by James Gibbs around the time the Silk Mill was built) and the river. It was demolished in 1972 but power stations always leave a legacy and here it is, next door to the Silk Mill: a very large 1960s electricity sub-station surrounded by a tall brick zig-zag perimeter wall. There was enough space to slot the new atrium ('civic hall') between the two, but the power company needed room to access the cables running in and out. The casual visitor has no idea that there is a gap for this behind the atrium wall, though a section of blank panels to the left of the entrance facade is the giveaway.

As you enter the building through its glass-and-copper entrance, two big physical objects make it clear that manufacturing in Derby has moved on considerably since its textile days. A part-exploded Toyota car is suspended over the entrance (Toyota's UK factory is within the city limits) while high up at the far end is a Rolls-Royce Trent fanjet, the kind that powers so many of the world's airliners. Rolls-Royce is synonymous with Derby, but the city is also a historic train manufacturer and railway centre. So the collection has lots of railway ephemera including a huge model railway set-up in one room that dates back to the Festival of Britain and has been added to ever since. And let's not forget ceramics, another big local industry.

Bauman Lyons' director Guy Smith is keen to emphasise the collaborative nature of this project in which the architect and the exhibition designer Creative Core worked together in the same team as the engineers, contractor and client under an integrated project insurance (IPI) contract designed to be non-confrontational. The Museum of Making is only the second project in the country to be delivered in this way, the first having been the newbuild Dudley College



of Technology. Smith applauds the model: it wasn't always easy, he says, but it achieved its aim of everyone working together to overcome the inevitable problems (which here include sorting the electricity substation zone, dealing with asbestos, coping with flooding and the pandemic) and to achieve a common goal. His client Hannah Fox, director of projects and programmes for Derby Museums, is equally positive. She sees the process of 'co-production' as extending more widely to the people of the city and region to help define what the museum should be: there was a great deal of hands-on consultation.

This museum has a lot of rentable space for events – especially the ground-floor 'Italian Mill' section, a large catered space which has its own entrance (originally the main entrance). But there is also design workspace up under the roof and, gloriously, some very well-equipped workshops at the back with machinery from ancient to modern, where you can make stuff whether it involves forging metal or using a CNC cutting machine.

Two relatively conventional galleries – one introducing you to the history of the whole World Heritage Site, the other taking you through the themes of manufacture in the area – are trumped by the controlled

- 1 Workshops
- 2 Gallery
- 3 Courtyard
- 4 Kitchen
- 5 Entrance atrium and café
- 6 Catered event space
- 7 Railway study centre
- 8 Model railway room
- 9 Open access gallery
- 10 Rolls-Royce gallery
- 11 Curator's office
- 12 Meeting room
- 13 Temporary exhibition gallery
- 14 Craft shop
- 15 Artist/maker studio
- 16 Image store
- 17 Staff room
- 18 Studio workspace
- 19 Tower
- 20 Belvedere

**IN NUMBERS**

**£11.5m**  
total contract cost

**£2,755/m<sup>2</sup>**  
GIFA cost

**4,175 m<sup>2</sup>**  
area

**55**  
kgCo<sub>2</sub>/m<sup>3</sup> calculation  
(predicted)



The mill's existing structure is revealed and sensitively adapted, with filtered daylight a welcome bonus.





## Buildings Museum



**Above left** If you tire of industrial exhibits you can always retreat to a rooftop belvedere.

**Above right** An inserted mezzanine has rentable workspace for designer-makers on the third floor.

**Below left** The Assemblage gallery is a guided open-access collection of marvellous junk.

**Below right** Well-equipped workshops keep the area's industrial skills alive.

Credits  
**Client:** Derby Museums  
**Architect** Bauman Lyons  
**Exhibition designer** Creative Core  
**Structural and civil engineer** GCA Consulting Engineers  
**Services engineers** PrestonBarber and Derry Building Services  
**Main contractor** Speller Metcalfe  
**Alliance manager (IPi contract)** IPiInitiatives

chaos of 'The Assemblage', essentially open-access storage of objects organised by material. From touchscreens you can find particular objects or groups of objects, and download or print out a path through the room, opening drawers, sliding racking or just peering at stuff on shelves.

One key decision made by the architect and exhibition designer was to embrace daylight and views out rather than excluding them. There are a lot of windows everywhere: light levels are mostly controlled by filtering film applied to the panes. So you always know where you are relative to the city and the river. There is even a new glazed belvedere at roof level, with comfy chairs,

looking south across the square outside.

It's commendable that everything remains very workmanlike. The new architecture keeps itself functional and discreet, the alterations are appropriate, the exhibition design mostly avoids tricksiness (though not the curse of slow-responding touchscreens). The story told here is a fascinating one for anyone interested in manufacturing and making. What's so far unknown is whether the move to include workshops and workspace will take off, so reconnecting the history of the area with the present day.

All in all, it's an audacious move by Derby Museums, and one with a genuine civic quality to it. ●



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# Cultivated hybrid

Wilkinson Eyre's Hilltop, Home of Gardening Science at RHS Wisley in Surrey is ambitious in its programme but less so in its sustainability

Words: Eleanor Young

The 'back' of Hilltop, part hidden by a protective bud. Education rooms are in the left wing, labs and herbarium in the right.



Hilltop, Home of Gardening Science, Wilkinson Eyre’s £35 million new building at the Royal Horticultural Society (RHS)’s gardens at Wisley in Surrey, poses a question about the language of architecture. You may know the site, as I did, from seeing the signs for it while driving out of London on the A3. It started life as a place of science with laboratories and trial fields. Now it is better known by its 1.2 million annual visitors (pre-Covid) as a garden-based visitor attraction, with cafés and shelves of plants to buy. The institution’s mission is split and so too is the building.

Set on the site of old glasshouses and the Honest Sausage café, Hilltop attempts to house café, flower shows and functions with plant science labs, library and classrooms in a bifurcating Y-shaped plan. On the science side it takes over from the Edwardian laboratories with their fluctuating temperatures, floods and biscuit beetles, which didn’t sit well with ensuring bio-secure labs or storing specimens from Charles Darwin’s Voyage of the Beagle. And it spreads out the visitors, giving them another destination, away from the existing honeypots of cafés, loos and shop at the entrance and the great glasshouses.



**Above** The open arms of the building have allowed the creation of three distinct garden areas around it.

**Below** Panelised chestnut cladding on the south-west elevation with the events hall to the left. In the middle, the café spills out into the world food garden.

IN NUMBERS	
£35m	Total contract cost, building and garden
£26m	Cost of building
£4,905	GIFA cost per m <sup>2</sup>
5,300m <sup>2</sup>	Total area

The two functions and the two other garden destinations set the diagram of the building. Wilkinson Eyre’s Jim Eyre throws open his arms to demonstrate the welcoming embrace of the plan, one arm out towards the entrance, the other to the glass houses.

What is the right language for a building that takes in all these functions? Should it have the presence of a great house, like the old labs, or the massing of a village cluster like the more recent welcome buildings? Should it have an arts and crafts flavour like the small cottages dotted around? None of these. Away from other buildings, Hilltop crests the hill, taking over from a broad belt of trees and half hidden by more trees from the main garden. Its narrow lengths of sweet chestnut cladding signal its fit with this wooded edge. In some places they hint at an agricultural antecedent. But the 2m cladding modules that the chestnut sits within tell another story, of buildability over craft. As does the ground floor in-situ concrete which took over from the lower-carbon steel option amid concerns for the programme when the contractor, Osborne, came on board. Large steels, glass expanses, an atrium; this large scale way of building – and designing for that



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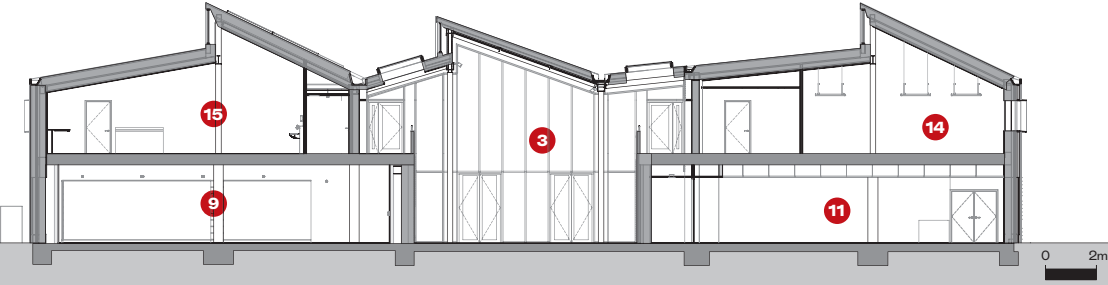
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### Buildings Horticulture

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Section AA

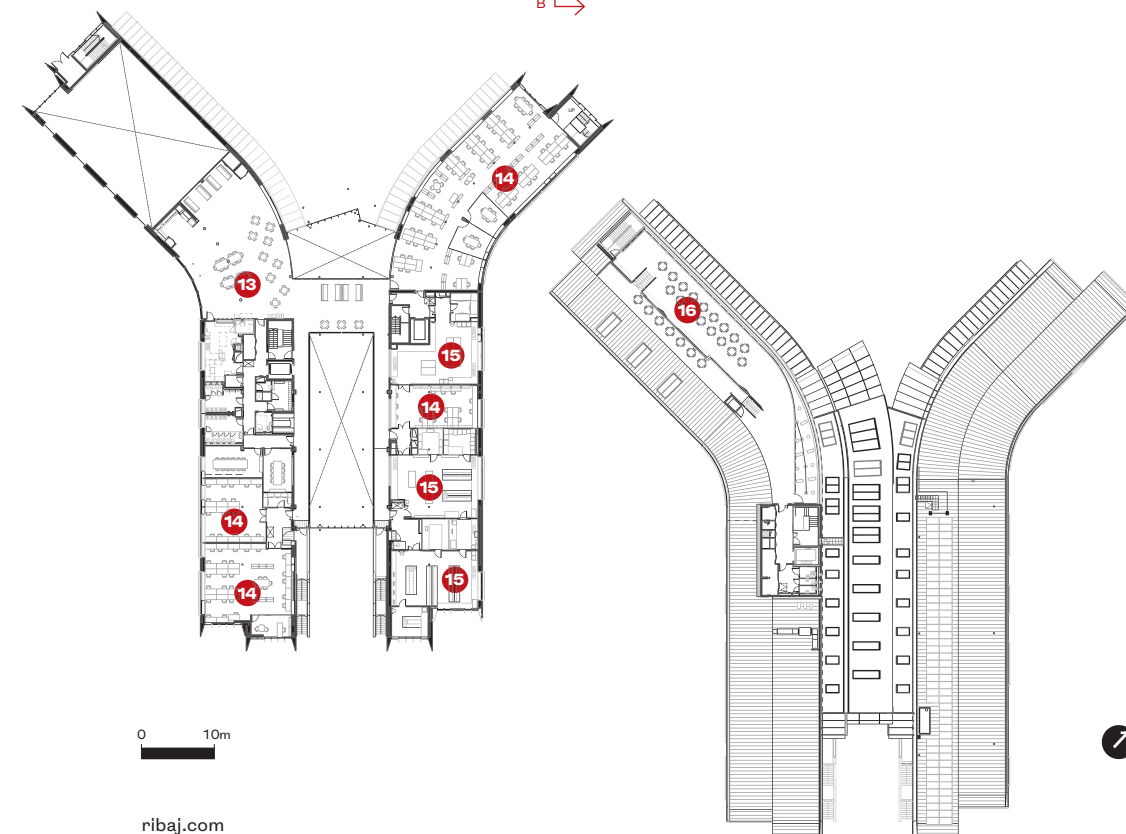
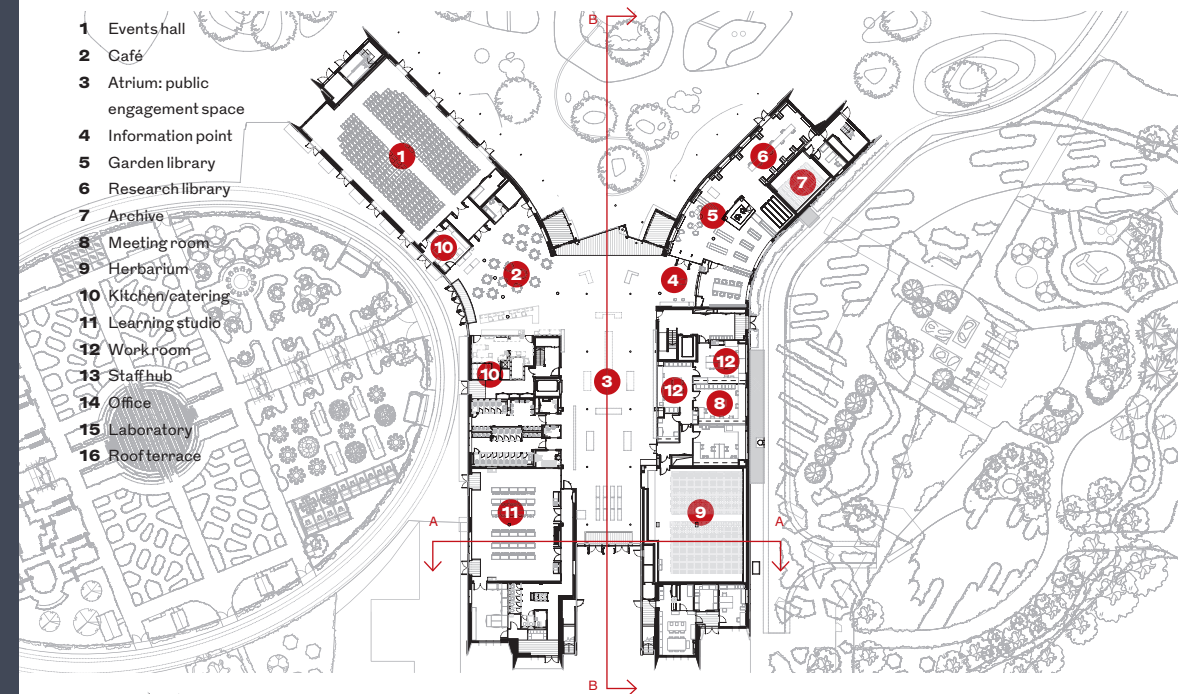


– has dogged university and school building of the last 15 years; lofty ambitions with feet of concrete.

Climbing up to Hilltop, the building reaches out towards you with that embrace but it is the gable ends that, oddly, are the first encounter, as if those arms are not thrown quite wide enough. And the building appears as if in many angled pieces. Each side of the 'Y', and the central atrium volume, has a split section with a clerestory for ventilation. Add in a glazed colonnade on each side and then extend two sections of glazed atrium roof as canopies over the colonnades and you don't know where to look.

The last few Wilkinson Eyre buildings I visited were for James Dyson on his campus in Wiltshire, which stand taut with design discipline. Hilltop has none of that rigorous editing of materials and expression. This is emphasised by its immediate surroundings where early planting has yet to take hold and soften the edges of the paths, and the scale of the plants throws the architecture into coarse relief.

Inside, the design is more straightforward. The rigour of the steel grid marks out the atrium which sweepingly connects formal gardens at the front with the informality of the green beyond the building – although this is currently stymied by the exhibition design and its large-scale panel at the entrance. The atrium neatly both draws together and divides the separate functions. One arm of the building has 'science' with a herbarium of rolling shelves of horticultural specimens, and a more conventional library of books. Above are plain labs where work on pests and diseases can be investigated in a contained way. The offices – unusually – bring the building to life as they stretch out towards the glazed gable ends with coloured baffles suspended from the thin 50mm concrete planks of the soffit (giving the space thermal mass).

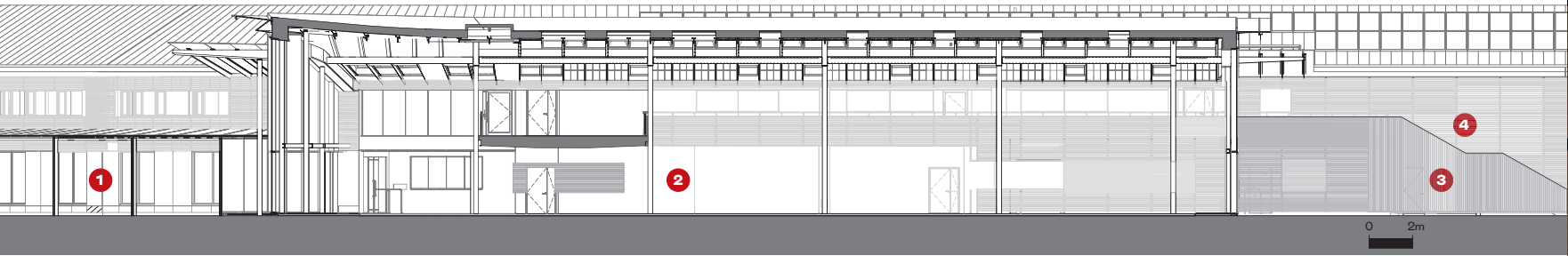


0 10m

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The RIBA Journal August 2021





The second wing has classrooms opening out on to garden teaching spaces and the newly planted world food garden. A small café kinks out from the atrium as the wing opens out into a double-height event hall with rooflights and windows sliced into the facade. They are part shaded, with hit-and-miss cedar slats above double doors. The building is contained – and partially protected from the noise of the A3 – by a bund edging the ‘back’ of the building and bursting with poppies and grasses.

The last decade has seen a huge investment in buildings and gardens by the RHS, both at its new Bridgewater Garden in Salford and at Wisley. At times there have been 30 capital investment projects running. At Hilltop’s opening, ‘ambition’ was a big theme, along with new Covid recruits to gardening and the potential positive impact of

Section BB

- 1 Library
- 2 Atrium: public engagement space
- 3 Escape stairs
- 4 Labs

Credits  
**Client** Royal Horticultural Society  
**Architect** Wilkinson Eyre  
**Main contractor** Osborne  
**Structural engineer** Michael Barclay Partnership  
**MEP services engineer** Skelly & Couch  
**Planning consultant** Montagu Evans  
**Project manager and cost consultant** Synergy  
**Acoustic consultant** Sandy Brown  
**BREEAM MLM**  
**Garden designers** Ann-Marie Powell, Matt Keightley  
**Landscape masterplan** Dan Pearson / Bradley-Hole Schoenaich  
**Interpretation designer** Agenda Design

30 million gardeners and their pots and plots on climate change and the biodiversity crisis.

What is surprising is that this ambition and climate concern didn’t translate into a more fundamentally sustainable building. Yes, it has timber cladding, PVs, LEDs and water attenuation. But it doesn’t, to give the most obvious example for a horticultural charity, use plants to improve air quality nor to create a protective microclimate around the building. Instead there are a few climbers scrambling up wires on the west elevation and a sample panel of a planted living wall inside. Experimenting with this could have put the RHS in the lead on another important area of garden science and put the £9 million investment in gardens at Hilltop to a double use. And perhaps it could have found a more appropriate expression for the fascinating work going on in this hybrid building. ●

Suppliers  
**Concrete** JP Dunn Construction  
**Steelwork** Hillcrest Structural Ltd  
**Facades** NA Curtain Walling  
**Sweet chestnut timber** Vincent Timber  
**Precast concrete** Strata Tiles  
**Glazing** Schüco  
**Roofing** Kovara Projects  
**Metal standing seam roof** VeioZinc  
**Acoustic timber cladding** BCL

**Right** From the staff-only first floor looking into the atrium, the grid cleanly marked out by the steel structure.

**Below** The ground-floor library.



RIGHT: PAUL DEBOIS

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# Coffee and fynbos

Critique  
Bosjes country estate

27

Nature shrouds and reveals Steyn Studio's elegant café and shop discreetly planted in a new garden that binds together Bosjes country estate in South Africa's Breede valley

Words: Sean O'Toole

## IN NUMBERS

2ha  
total garden area

190m<sup>2</sup>  
café GIA

559m<sup>2</sup>  
deli GIA

The family of the current owner of Bosjes, an ambitious new hospitality development and garden on a working farm 110km northeast of Cape Town, took ownership of this mountainside property in 1831. Among the fixtures was a rectangular manor house erected in 1790 in the prevailing Cape-Dutch style. The years between the house's construction and its acquisition by the Botha-Stoffberg clan were tumultuous. Deep ravines in the neighbouring mountains provided ample refuge for bandits and cattle rustlers. Waaihoek Peak, immediately behind Bosjes and named for the intemperate winds that plague the heat-wracked Cape in summer, was especially notorious. The last 'drosters' were flushed out of their elevated hideout only in the 1820s.

South Africa's colonial history is inescapable at Bosjes. Formerly known as Bosjesman's Valley Farm,

the estate's shortened name retains a vestigial reference to the region's indigenous San peoples – Bushmen, or Bosjesmans in Dutch. Its new name translates as 'bushes' and shifts the focus to the region's once dominant, but now critically endangered heathland of fynbos and renosterveld. Opened to the public in early 2017, Bosjes initially comprised a guesthouse, restaurant and audacious chapel. This year it unveiled an elegant garden café and shop, tactfully placed in two sunken, amphitheatre-like spaces within a processional garden. To keep their charm discreet, their vaulted ceilings are over-wrapped by the lush landscape. The new garden, laid out next to a long thin vineyard that mirrors its dimensions, binds together the estate's disparate architectural elements – notably the fusty manor house and chapel – into a coherent unity.

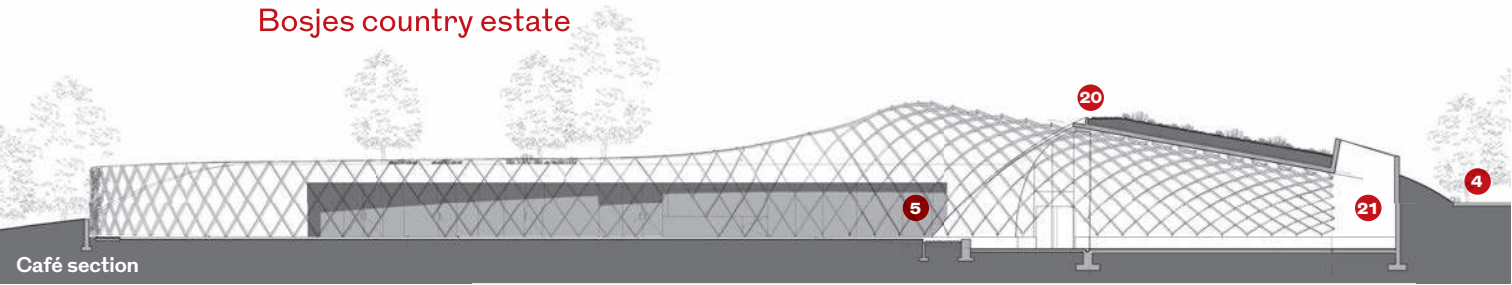
**This image** The café, one of two new buildings sunken into the landscape for visitors to Bosjes.

**Right** Rewilded greenery and heathland will envelope the excavated pristine lawns in the middle for visitors to sit at leisure.



DAVE SOUTHWOOD (2)





While discontinuous with the stolid vernacular of the surrounding farms, Bosjes forms part of a wider post-apartheid reimagining of the fruit and wine farms around Cape Town into ritzy hospitality destinations, notably in Stellenbosch and Franschhoek. In its abundant novelty and experimentation, the estate nonetheless preserves many signifiers of the building ethos and cultural values particular to a valley once at the outer edge of white settlement in this part of Africa.

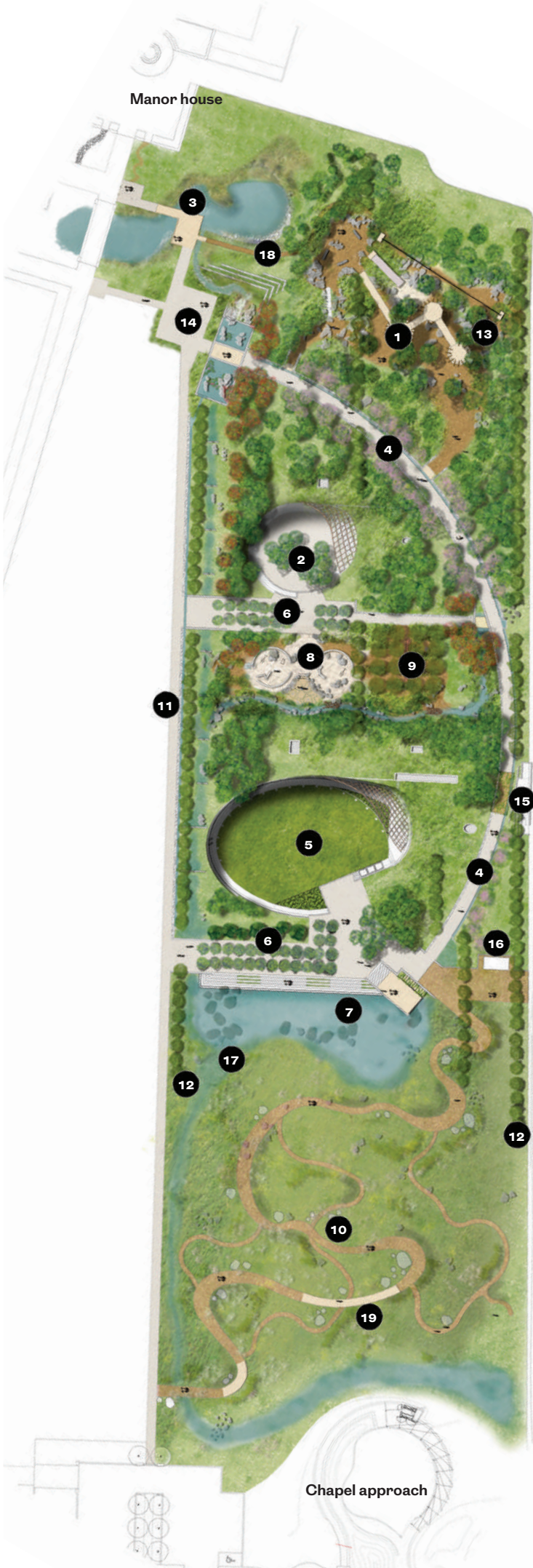
The architect responsible for much of the estate’s idiosyncratic language is Coetzee Steyn of Steyn Studio. A former TP Bennett staffer who divides his time between London and Madrid, Steyn was born further along the Breede River Valley, in Montagu, and trained as an architect in Cape Town. He is intimately familiar with the imposing beauty of the Cape Fold Mountains and the agrarian settlements that have flourished in

their basins. Introduced to the Bosjes owners in 2005, he threw his hat into the ring five years later when he heard that they had jettisoned their original idea of a residential estate in favour of a hospitality venue.

Bosjes is Steyn Studio’s first major public project, albeit on a private estate. Even with the addition of the garden and its related architectural features, the centrepiece remains its Instagram-friendly chapel.

The pristine white of the chapel’s roof also achieves an unexpected reconciliation. From a midpoint in the new garden, the estate’s two major built structures – the manor house and chapel – are visible as white protrusions over an organised landscape of greens and browns. The garden is a secondary intervention, despite including the submerged garden café and gift shop, an elevated bridge, children’s play area and extensive water features with dry-packed stone walls. The client wanted

- 1 Boombrug elevated timber walkway
- 2 Shop and forecourt
- 3 Pond bridge crossing
- 4 Main walkway
- 5 Deli and events lawn
- 6 Indigenous fruit orchard
- 7 Retention pond and lookout deck
- 8 Sand and water play
- 9 Woodland glade
- 10 Renosterveld meadow
- 11 Existing chapel walk
- 12 Wind break trees
- 13 Wild woodland play
- 14 Entrance forecourt
- 15 Service connection and arbour
- 16 Restrooms
- 17 Retention pond overflow
- 18 Universal access ramp to boombrug
- 19 Renosterveld boardwalk
- 20 Timber trellis
- 21 Lightwell



DAVE SOUTHWOOD



**Above** A glimpse of Steyn Studio’s 2017 Bosjes Chapel sited on the edge of the reinvigorated landscape, beyond the trellis-work of the new sunken café.

**CHAPEL OFFERS SELFIES AND SERENITY**

Bosjes chapel, sitting at the bottom edge of the gently sloping site, is composed almost entirely of a self-supporting concrete roof. Its dramatic undulations, incorporating glass facades, gesture to the theatrical gables of English architect Herbert Baker’s Cape-Dutch Revival style (1892-1912), although that’s only the half of it.

The chapel is located next to the family’s burial plot and is flanked by a small garden with a water feature illustrating the biblical parting of the Red Sea. Steyn adapted the ‘sinuous shape’ of birds in flight that he saw recorded in photographs by Eadweard Muybridge – from his 1887 series on animal locomotion – into a waveform roof that materialises the biblical verse, ‘We find protection under the shadow of your wings’ (Psalm 36:7). Set on a podium and flanked by a reflective water feature on one side, the chapel is unequivocally a thing to be gawped at. It exudes a rakish confidence, as pavilions so often do. But once entered it becomes a reverent – and acoustically charged – space from which to view the abundant landscape. Its glass panes are centrally joined with wooden elements that form crucifixes, fostering a mediated encounter with the landscape.

**Below** Mountains, wings in flight: the evocative undulations of the chapel’s roof close up.



ADAM LETCH

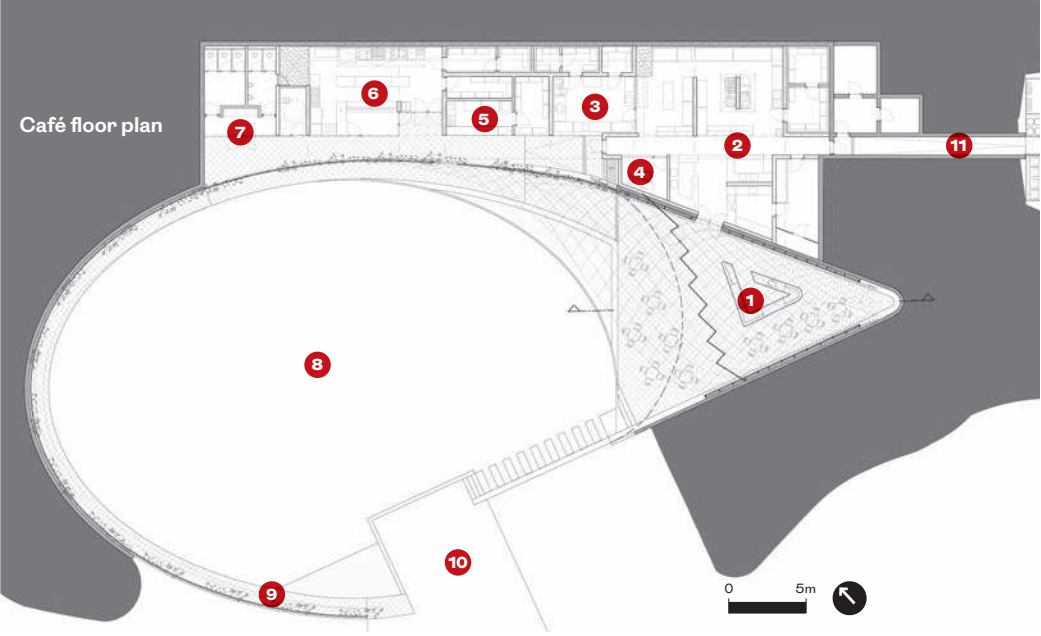


a scheme that would add bulk without interrupting existing sightlines, to create a subordinate environment informed by architectural modesty.

Steyn was unfazed by the brief. He likens the estate’s manor house and chapel to the region’s two dominant mountains, Waaihoek and Slanghoek, and the garden to the fertile valley that once sustained a floral abundance. To implement the technically demanding brief of hiding approximately 750m<sup>2</sup> of building in a rolling garden environment, Steyn partnered with Square One Landscape Architects. The practice’s founder, Sydney-based Mark Saint Pöl who is originally from Cape Town, brought a wealth of experience to the project. Saint Pöl had worked on Green Point Urban Park, a lauded public project in Cape Town that includes a didactic garden, and nearby Botha’s Halte Primary School, a thoroughgoing reimagining of a rural farm school.

Bosjes was reached via an unpaved road that threads past the primary school and the undulating chapel roof, providing a jumble of first impressions. But now a new access road from the valley’s arterial route approaches the estate frontally, through vineyards and farmlands, with the manor house functioning as the chief orientating beacon. This formal approach is in keeping with the choreographed way Cape Dutch estates are traditionally encountered. In this idealised schema, the garden operates as an interstitial space to access the chapel, which presents as the coup de grâce following a series of architectural reveals. Of course, visitors can and do short-circuit this navigational circuit by parking nearer the garden café to access a reviving coffee.

The garden at Bosjes has been organised into three parts: a ‘wild woodland’ at the manor house end with an incipient grove of flowering Cape Chestnut, a median



- 1 Deli
- 2 Deli kitchen
- 3 Bakery
- 4 Chef’s office
- 5 Bar
- 6 Banqueting kitchen
- 7 Toilets
- 8 Events lawn
- 9 Walkway
- 10 Informal stage
- 11 Service entry

**Below** Decorative trellis work inside and out recalls the portable huts of traditional San herders.

‘grassy glade’ that hosts the two submerged retail spaces with substantial hidden bulk, and a ‘renosterveld meadow’ with slatted walkway leading to the chapel. ‘The lower portion of the garden has been dedicated to the rehabilitation of endangered renosterveld and fynbos species,’ says Saint Pöl of the planting. ‘The intention is to demonstrate how derelict farmland can be restored and to showcase these incredible species.’

The arcing form of the main processional route is one of the main structuring elements of the garden. It not only increases the impression of the site’s width but also enabled the terrain to be shaped to accommodate the staggered spatial experiences hidden in the landscape. Steyn Studio’s design of the complementary garden café and gift shop is informed by both vernacular and biophilic design. Decorative trellises – oak at the café, metal at the gift shop – gesture lightly to both the portable huts created by San herders using curved, slatted wood frames covered with woven mats, and the thatched truss homes of early Dutch settlers.

Bosjes’ submerged buildings are analogous to these dwellings, says Steyn, in that they have the landscape thrown over them. While he was tempted to employ a pure gridshell design for the hospitality areas, the technology is not widely known in South Africa. The trellis features, which extend to the interiors of the glass-enclosed café and gift shop, will eventually become overgrown with climbing plants, further accentuating the dominant leitmotifs of inside-outside and visibility-concealment in the garden.

Zigzag shadows cast by the trellis gave Steyn the basis for the vertically stepped window fronts. This offers better lateral structural stability against wind loading without the need for additional steel structures, and avoids the mirroring associated with large planes of glass. The vaulted ceiling of the front-of-house spaces is composed of a thin, white-painted concrete shell. Additionally, in the café, a natural light well at rear integrates a cross motif. Floors and walkways are terrazzo throughout. These treatments echo the materials and logic of the chapel, while triangular copper lights suspended from the ceiling define the floor plan in both. Liam Mooney handled the interior design.

DAVE SOUTHWOOD



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## Credits

**Design architect**  
Steyn Studio (UK)

**Project architect**  
Meyer & Associates

**Landscape  
architect** Square  
One Landscape  
Architects

**Furniture & fit-out  
design** Liam Mooney  
Studio

**Main contractor**  
GVK-Siya Zama

Construction  
**Structural  
engineer** Grobler &  
Associates

## Gridshell dstructural rngineer

Henry Fagan &  
Partners

**Civil engineer**  
AVDM Consulting  
Engineers

## Mechanical engineer

Ekcon Consulting  
Engineers

**Heritage consultant**  
Graham Jacobs

**Left** Café interior with deli counter.

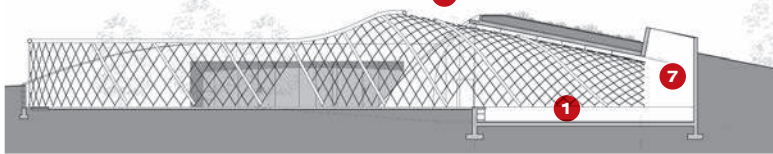
**Below** Retention pond  
and lookout deck.



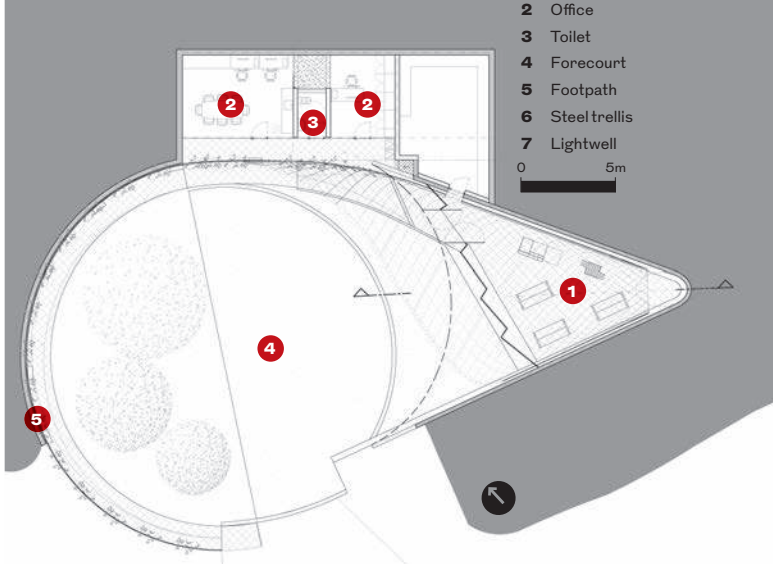
DAVE SOUTHWOOD(2) -

Sean O'Toole is a Cape Town-based journalist and editor

## Shop section



### Shop floor plan



Despite seesaw Covid restrictions and a winter downpour, the garden café was brimful on a recent visit. Big it isn't, but seating areas are generous and the flow between the serving counter and kitchen – an entirely concealed space that doubles as a prep area during functions at the restaurant – is effortless. In the absence of mature trees, white umbrellas shade outdoor diners from the harsh summer sun. Picnics are encouraged on the lawn. The cosy atmosphere of the café may well be tested by the seasonal influx of upcountry visitors and international tourists (tip: arrive early). The evolution of the larger garden, both in height and lushness – as well as the reopening later this year of the suspended retail shop, which focuses on local design – will take some pressure off the more attractive café.

Balancing beauty with self-abnegation is central to the garden additions at Bosjes. 'You cannot be completely quiet and hide the architecture,' concedes Steyn, pointing to the slim, dome-like facades and trellises as important lures into the experience of the hidden architectural spaces in the garden. 'The chapel is a true pavilion, whereas here the buildings and their placement became more like clearances in a forest.' Retail and catering imperatives notwithstanding, the principal function of these theatrical spaces is to invite pause and contemplative nature worship. 'I see them as amphitheatres that still the environment around you and amplify the mountains beyond.' Appreciation of the architecture is, of course, encouraged too. ●





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### Michael Davies



The Climate Change Committee is the UK government's independent advisor on emissions targets and preparations for climate change. CCC member and Bartlett professor Michael Davies explains the findings of its latest reports

**What does the CCC's Independent Assessment of Climate Risk say about the built environment?**

It identifies the eight most urgent risks, of which one is overheating in buildings. At the extreme, that brings increased risk of mortality: there are several thousand heat-related deaths every year in the UK and that's predicted to triple by mid-century. Heat can also affect sleep, cause discomfort and impact productivity in offices, for example. There are challenges in schools, prisons, hospitals and care settings – both for new builds and retrofits. We urgently need to amend regulations to reflect that.

**Why is a rapid regulatory response important?**

Over the next five years, 1.5 million new homes are due to be built in the UK, and we should start to retrofit existing buildings at the rate that's required to reduce emissions. The risk is that we lock in future problems by inadequate construction. Adding insulation is valuable in reducing energy demand, but without a carefully co-ordinated approach to ventilation it can increase the risk of overheating. Low-energy retrofitting is absolutely essential, but must be done in ways which minimise the risks rather than aggravate them.

**What does your progress report to parliament on climate change mitigation and adaptation tell us?**

There has been a great success in reducing emissions from electricity generation, but that hasn't been matched in transport, industry, agriculture or the built environment. It's a big challenge now, and we still await the government's much-delayed Heat and Buildings Strategy – expected imminently – which is critical to reducing the carbon emissions of millions of dwellings. Adaptation action has also failed to keep pace with worsening climate risk.

**Is the importance of adaptation often overlooked?**

Yes. There is a perception that if we focus on emission reductions everything will be fine, but that's not the case. The climate has already changed. There is now 25% chance of a hot summer like that of 2018, compared to 10% a few decades ago. Our current housing stock is not fit to cope with that. It's likely that the UK will experience something like a further 0.5°C temperature rise by mid-century, even in really ambitious scenarios. Alongside the vital mitigation work – reduction of emissions – we need to adapt the built environment for the climate change that is already locked in. ●

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Sustainable  
ArchitectureDesign, construction  
& technology

# Make low-tech our mantra

The carbon-rich technologies that launched modernism and high-tech now fuel climate change. A reset to sustainable, low-tech design is now imperative



**This image** The lengths of UK-grown Douglas fir defined the span of Feilden Fowles' studio in south London, based round a simple pitched extrusion.

**Right** Simple pinned and fitch joints were designed for ease of assembly and disassembly of the studio.

## Edmund Fowles

The architectural approaches of recent years, often gathered together under the unsatisfactory umbrella of 'contemporary' architecture, appear to be falling well short of the radical reform needed to tackle today's climate and biodiversity emergency.

Without a compelling theory of architecture to respond to the challenges and opportunities of our own age, spatial and material ideals instilled by the modern movement still define mainstream attitudes to building.

A century ago, in 'Vers une Architecture', Le Corbusier dismissed over-stylistic trends, rejoicing in the possibilities of mass production and materials such as reinforced concrete, which facilitated his use of pilotis and ribbon windows to enable the free plan.

A generation later, digital design tools and advanced manufacturing processes facilitated the seemingly limitless structural possibilities of the high-tech movement. Paired with the optimism and boom of the 80s and 90s, it led to an extraordinary development in methods of construction, fit for the scale of global growth that followed. The best examples of high-tech were dazzling in their clarity, efficiency and elegance of structural expression, such as the 1971 Centre Pompidou by Rogers and Piano in Paris.

However, Richard Rogers' stridently cantilevering final building this year felt particularly poignant. Given the Château La Coste Gallery's flagrant disregard for embodied carbon, it seems a fitting memorial to mark the end of an era, and a new agenda.

Today this attitude of excess is perhaps no better showcased than in the work of Bjarke Ingels' BIG, who turbocharged Mies van der Rohe's maxim 'less is more', for a 21st



DAVID GRANDORGE (3)

## Over-technologisation and mechanisation has made buildings that offer little to nourish the soul

**Right** The timber beams of Feilden Fowles' studio cantilever outdoors to support a covered walkway.

century audience, in his 2009 book titled 'Yes is More!'. Form now seems slave to the big idea; as it is technologically possible to do just about anything, resulting in buildings that are undulating, contorted, writhing masses of glass and steel and concrete. The logical end of modernism, 'Junkspace' as Koolhaas prophesied, is here.

### Move away from stylistic eclecticism

This insouciance, where 'the idea', fuelled by boundless technological capability, eclipses rationalism, must be challenged in an age of depleting resources and an urgent need to reduce carbon emissions. Fortunately, a new generation of practitioners and thinkers is leading a growing shift away from the pre-occupations of modernism and stylistic eclecticism, towards leaner, more vital forms of architecture. We call this approach low-tech.

While Le Corbusier drew from the cutting-edge technology of the time, little formal inspiration can be found in a microchip today. Compared to the wizardry in your smartphone, buildings are relatively simple accumulations of material, yet they have somehow become slave to technological advancement.

Over-technologisation and mechanisation has resulted in buildings that are such finely wrought, finitely controlled, antiseptic glass and stainless steel edifices, they offer little to nourish the soul. One outcome, sick building syndrome, is a worsening clinical condition recognised by the NHS. Clearly something is wrong when, instead of nurturing us, buildings make us ill. It is no surprise following the Covid-19 pandemic, many would prefer not to return to inner city offices. This reflects a broader social trend – a resurgence in people seeking reconnection with



nature through craft, making and the outdoors, as a counterpoint to living life online.

Low-tech seeks to re-balance the relationship between buildings and technology. It is about leanness, fewer components, a preference for natural, low-embodied carbon materials, reduced reliance on technology and mechanical servicing, robustness and flexibility – in essence, simplicity.

These practical tenets combine with broader social, wellbeing and ethical ambitions, ranging from ensuring buildings have sufficient access to green space, to the responsible sourcing and fabrication of materials, supporting and stimulating local craftsmanship. In this way it shares many of the social ambitions of the Arts & Crafts movement, echoing Ruskin's 'truth' – using handcrafted and an honest display of materials, and 'memory' – creating buildings that respect the culture from which they have been developed.

But far from being anti-technology, low-tech is interested in using all forms of it as efficiently and sparingly as possible. It always seeks the simplest solution to the problem – vital in an age of resource scarcity.

In fact, to create leaner buildings, there is a greater reliance on new digital technology to model and quantify outcomes. Low-tech approaches must combine intuitive design, often looking back to historic precedents and forgotten methods, with the meticulous and empirical processes of iterative design, digital modelling and measurement. It relies on the advancements in digital design tools, such as IES (Integrated Environmental Solutions) and embodied carbon calculators, which are now vital to the design process to tune, refine and whittle designs down to their essentials.

The challenge of course in this reductive approach is the risk of buildings becoming

stripped bare of expression or exuberance.

We believe there are great opportunities for architects to define a new, low-tech language of architecture, and have been experimenting both in our own work and learning with interest from other practitioners.

### New opportunities for exuberance

We built our own studio on a meanwhile site in Waterloo, in 2016 (RIBA), May 2017). It was our first attempt at a truly low-tech building, in part due to our limited budget and the imperative that we would one day have to dismantle and move it. But this was the start of a great partnership working with structural engineer Peter Laidler of Structure Workshop. Parameters were set early in the design process, such as using solid homegrown timber for the frame. This in turn defined our maximum span of 8m due to the availability of Douglas fir sections. The building, a simple pitched extrusion, was designed very much in section, optimised to harness direct light and warmth (in winter) from the south, with an asymmetric pitched roof generating a clerestory window offering diffuse north light deep into the plan. The beams cantilever outdoors, forming a covered walkway, doubling to shade the south-facing glazing in peak summer months. Slight angling of the northlights creates a small zone between the glass and north wall, to expel air at high level and stimulate passive cross-ventilation.

These simple calibrations were measured and iterative, optimising the form, aspect and aperture of the frame. All frame connections were designed for ease of both assembly and disassembly, using simple pinned joints with fitch plates. We wanted each element of the building to work as hard as possible and often



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## Intelligence Low-tech design

to fulfill more than one purpose. For example, the ply sheathing to the roof and perimeter walls doubles as the visual lining, there is no plasterboard nor wet trades involved. Gutters and downpipes were eliminated, with run-off from the cantilevered canopy captured by a rill below and delivered to the garden. The result is a building which achieves an embodied carbon of just 310kg/CO<sub>2</sub>e/m<sup>2</sup>.

The studio building proved instrumental in putting into practice our early thinking on low-tech principles. The challenge is how to scale these ideas, but recently we have been trying to apply and develop these principles through larger, more high-profile projects.

The complexity of modern cavity wall construction, with endless layers and secondary elements that will degrade and fail over time, led us to explore the use of solid masonry wall construction on a trio of buildings at Green Templeton College, Oxford. This approach also reduces the associated high Kg/CO<sub>2</sub>e of typical steel or concrete frame infilled with blockwork. To model the thermal characteristics, we worked closely with Structure Workshop, which developed its own embodied carbon tool, and Ritchie + Daffin environmental and services engineers. The proposed construction simply uses two densities of Porotherm blocks. Extruded clay captures air in a matrix of voids to increase its thermal properties while omitting the need for cavity insulation. They are load-bearing up to four storeys, with floor slabs bearing onto the inner block. They can be simply finished inside and out with lime

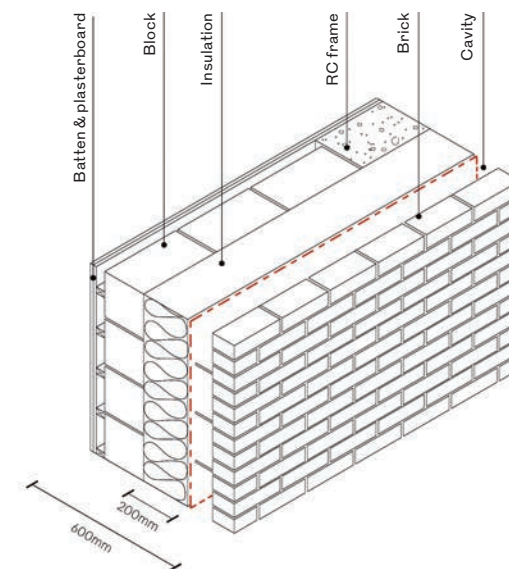


**Above** Can low tech design be scaled up? At Feilden Fowles' National Railway Museum York Central Hall a 3500m<sup>2</sup> timber frame is planned.

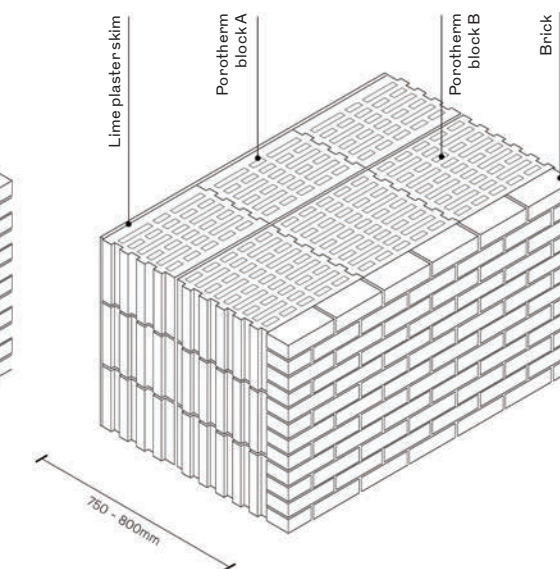
**Below** A low tech and radically simplified wall built up with Porotherm for Green Templeton College, Oxford, by Feilden Fowles.

Much construction wisdom  
has been lost over years that  
is only now being resurrected

Traditional RC frame block and brick cavity



Porotherm solid wall construction



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renders, achieving a breathable system that also moderates internal humidity and has exposed thermal mass, reducing temperature fluctuations. This method of construction eliminates swathes of materials: cavity insulation, wall ties and trays; building papers; secondary structure; plasterboard and so on.

It also raises interesting questions about the formal possibilities of more primitive and low-tech construction approaches combined with factors such as the reduction in glazed area to lessen heat loss. The result is a more stereotomic architecture, where openings are carved from a singular mass forming deep reveals and more dramatic play of light and shadow.

### Working with natural materials

We pursued this monolithic language of architecture, with deep load-bearing walls, activated to serve multiple purposes, at Yorkshire Sculpture Park on its gallery and visitor centre, The Weston. Aware of the scrupulously controlled environments often required to moderate temperature, humidity and ventilation to preserve artworks, we talked to Julian Cottrill of Skelly & Couch, about how to achieve this. Julian told us how natural materials buffer moisture and humidity in many historic, vernacular buildings. This is due to the hygroscopic qualities of materials such as lime and clay, which can absorb moisture from the air. Despite this, the science and data have only recently been developed, notably by Tim Padfield at the University of Denmark.

The concept was developed through a mixture of thermal modelling using IES, spreadsheet humidity calculations and measurements taken on the hygroscopic properties of specific clays. The resulting design uses 10,000 unfired clay bricks, arranged in a labyrinth within a deep section of wall adjacent to the main gallery space. Air is drawn through here to absorb humidity before reaching the gallery via a discreet low-level plenum.

This passive humidity buffer reduces energy use compared to mechanical systems by up to 60%. It was however only possible due to the client's boldness in departing from the norms of a highly serviced and controlled gallery environment, often dictated by artwork owners and insurers. Humidity records have shown that the system is able to achieve very slight humidity variations of just +/- 4%. It goes to show how much construction wis-



dom has been lost over years and only now being resurrected. It can be seen in companies like Ty Mawr, a manufacturer and distributor of sustainable building materials based in Brecon, which has long promoted the benefits of age-old materials and forgotten methods of building. There are great opportunities for architects to employ these techniques and materials on new commissions, although with more contemporary applications.

Such an approach has been brilliantly demonstrated by Practice Architecture, which featured in the recent RIBA Architecture Anew talks. The Flat House project at Margent Farm in Cambridgeshire, uses hemp grown on site to form prefabricated, timber-framed cassettes containing hempcrete, which constitute the main wall construction system of the three-bedroom house. Not only does the hemp serve to sequester carbon; minimising the distance between raw material production, harvesting, processing, manufacture and delivery, it significantly reduces the project's embodied carbon. The standardisation of panels also seeks to democratise construction by assisting with maintenance and operation, future upgrading and replacement of parts. This pioneering project is being used to drive further research by Material Cultures – an R&D initiative that came out of it – into sustainable and natural construction materials, in turn supporting circular economy principles.

It is encouraging to see a range of public projects being delivered that echo these emerging low-tech principles.

## To initiate real change at scale we need intelligently defined policy and radical regulation

**Below** Mae Architects used recycled materials including waste-based StoneCycling bricks on Sands End Community Project.

**Right** At Flat House by Practice Architecture hemp grown on site is used in timber cassettes – the main wall construction.

### Materials plus restrained approach

Sands End Community Centre by Mae combines the use of recycled materials with an intelligent and restrained approach. The centre's placement, orientation and massing reduces overheating, maximises natural daylight, and promotes passive ventilation.

Project architect Michael Dillon describes how the material choices had to work as hard as possible, obviating the use of unnecessary linings to use less material more efficiently. Over 35% of the building's materials contain recycled matter, together with a CLT timber structure that has been responsibly sourced and will sequester carbon rather than produce it. One of the key contributors to this impressive figure is the use of StoneCycling bricks, a revolutionary product using waste – in this instance, recycled glass – to form up to 70% of the brick compound. The reformed bricks are fired with 'forest compensated



PALOMA GORMLEY

gas', which means trees are being planted to compensate the footprint. The resulting brick therefore has far lower embodied carbon than newly formed UK brick – and upcycles construction waste.

Scale remains one of the greatest challenges to the low-tech agenda. While there are many exciting and encouraging projects they remain of a relatively modest size. It is hard to conceive how these principles may be effectively and economically scaled up to larger buildings, but we are now embarking on a project with The National Railway Museum in York on its new Central Hall project, putting forward a 3,500m² solid timber frame. Fortunately, the Science Museum Group, which runs the museum, is an ambitious and enlightened client.

To initiate real change at scale, architects need inspired and visionary clients, developers and patrons to buy in, but vitally we need the backstop of intelligently defined policy and more radical regulation to kick the construction industry as whole into action. The RIBA's 2030 Climate Challenge has set admirable and ambitious targets for architects to move towards, but they remain optional and we need regulation to catch up.

More restriction and a need to reduce will of course be seen as regressive by some, but it should be framed positively as the spirit of our age, reflective of the broader societal changes we will need to embrace over the coming decades – consuming and travelling less, moderating our diets and even comfort levels.

Architects must seize this opportunity to define a new language of architecture for our time. Actually, less is less, but today that is precisely the aim. ●

Edmund Fowles is director and co-founder of Feilden Fowles



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# Light roof

A competition to design a house daylit from above seeks inspiring and inventive interiors



As our cities densify, and straightforward sites become ever more scarce, attention turns to backland plots and enclosed courtyards that – with a good dose of persistence and architectural ingenuity – might just accommodate a house. Access is often tricky, as is the negotiation of numerous party walls, but the greatest challenge of such landlocked sites is the availability of daylight, fresh air and views. Hemmed in on all sides, often overlooked and overshadowed, they receive light only from above, which must be brought down through the building by skilful manipulation of the roof and the section.

In recent years, the architects of some exceptional projects have turned such constraints into opportunities to make powerful and exceptional interiors shaped by light. Limited access to daylight underlines its value, driving the arrangement of spaces and the character of the interior. Shadow patterns and views of the sky make features of the movement of the sun and changes in the weather.

The RIBA J Light Roof competition, in partnership with Keylite Roof Windows, asks entrants to imagine a generous family home for a compact site that is enclosed on

all sides, so that the only access to daylight is from the sky directly above. Take an existing or imagined site – a backland plot, a courtyard at the centre of a larger building, or the ground beneath a private garden – and create spaces with a quantity and quality of daylight suited to all parts of domestic life: sleeping, working, cooking and eating, relaxing and entertaining. The task is not merely to ensure adequate illumination, but to add character and interest to diverse interior spaces through direct, borrowed, filtered or reflected toplight. ●

**Above** In this project, Keylite roof windows give views of the changing sky that animate the interior.



## BRIEF

The house should be arranged over more than one storey. Atria and internal lightwells may be used, but should not account for more than 20% of the site area.

Consideration should be given to how views of the sky and changing weather might enrich the experience of living in the house.

Designs should use the configuration of plans and sections, and the type and location of openings in the roof, to create daylight conditions that vary throughout the building and over time. The means might include, but are not limited to:

- Atria, windows onto lightwells and internal courtyards lanterns and oculi
- Skylights and operable roof windows
- Reflective light tubes, mirrors and light shelves
- Blinds and shading devices

## CRITERIA

Judges will look for imaginative but workable schemes which take limited access to daylight as an opportunity to explore the potential of toplight, borrowed daylight and sky views in a domestic setting. The winning proposal will:

- Be spatially innovative
- Relate the form and architectural character of the building to the sources of available light
- Turn the limitations of the site into an architectural advantage

## SUBMISSIONS

Entries must include the following:

- An entry form, including a text of no more than 400 words, describing the approach to daylighting
- Drawings laid out on no more than two A3 sheets, supplied as pdfs. These are to include:
- Floor plans, including north point
- A key section
- 3D axonometric or perspective images that convey the nature of the proposition
- Lighting and ventilation, and the quality of the spaces envisioned
- Any supplementary images you may consider helpful to explain the proposition

**DEADLINE: 14.00 hours, Tuesday 14 September**

## PRIZE

Winning and commended entries will be published on [ribaj.com](http://ribaj.com) and in the print edition of the RIBA Journal. There is a cash prize of £2000 for the winning entry, and £500 each for three commended entries.

Download the entry form at: [ribaj.com/lightroof](http://ribaj.com/lightroof)



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# Out-of-town revival

Business parks may be an unloved model but they have the opportunity to evolve into small village communities

Inhabiting generous external spaces, business parks, as well as diversifying the building uses, could create a richer more communal centre as Apt's concept sketch shows.



The best business parks have a major asset whose value has increased during the pandemic: their setting

## James Ewen

The past 16 months have seen extensive coverage of the future of the office and the high street. There has been debate over the impact on our daily lives of the much-vaunted exodus from our major towns and cities to the countryside and to the affluent green spaces of suburbia. There has not been a lot of discussion about the somewhat unloved, out-of-town, edge-of-city business park and how these exceptional times are likely to mould the future of this key contributor to the UK's workplace model.

This is a question we at Apt have been considering over the past year. It has become pertinent to our studio since, earlier this year, our buildings 400 and 450 Longwater Avenue completed at Green Park, Reading, one of the country's most established business parks. It has been a stop-start journey of seven years, during which time we have become very familiar with Green Park, which is within the M4 tech corridor and close to London and Heathrow.

With their voluminous column-free floor plates and floor-to-floor heights in excess of 4.4m (on our projects), business park buildings are shaping current and future thinking on offices with their exceptional internal daylighting and uninterrupted views of the park's maturing and beautifully landscaped surroundings. They can achieve inner-city office quality with imaginative detailing and thinking to a strict budget and capital expenditure price point.

But despite providing some excellent work space, business parks need reimagining. The 2019 British Council of Offices guide, The Future of Business Parks, described them rather drily as 'single-use compounds that are generally disconnected from surrounding land uses, and because the locations are remote, are heavily reliant on roads, highway infrastructure and single-occupancy vehicle commuting patterns, but provide relatively easy driving and parking access'.

That says it all – suggesting a relic of the past and an unfashionable model for the workplace, with a standardised formula of



office buildings with large floorplates, expansive car parks and in some cases, remote locations and uninspiring surroundings. Business parks now also have the additional challenge of having to compete with people choosing to work from home and hybrid flexible working arrangements, bringing a certain irony to how fast this model is changing. The BCO correctly cited a ‘trend for companies to relocate to more vibrant urban centres’.

How can business parks and their masterplans evolve to provide a better experience? And what assets do they already have to make themselves more attractive?

The very best of the country’s business parks have a major asset whose value has increased over the pandemic: their setting, often within a well-designed biodiverse environment. As we readdress our relationship with green space, this is appealing. With many business parks enjoying close proximity to the openness of the green belt, the potential to capitalise on their surroundings is a significant post-Covid asset, where outdoor space and fresh air has become much valued.

Many business parks, in both terms of buildings and infrastructure, have built-in flexibility, but they need to start demonstrating this effectively. Across the UK there are many existing business parks capable of adaptation through creative design, including to residential uses, enabling living and working to happily co-exist, without most of the constraints found within inner-city environments.

Key considerations for the future are likely to include providing new, non-car-based



Spacious simple floor plates have inherent flexibility as with Apt's 400-450 Longwater Avenue at Reading.

connectivity – trains, trams, buses and bikes – as well as densification so as to bring a critical mass of crossover functions: residential, schools, shops and logistics.

At Green Park, this is all under way as it reimagines its future. New transport links back into Reading are progressing, as well as new homes adjacent to the park that cover a variety of residential models. All these will assist the business park in attracting new tenants and new life to its green spaces.

This idea of a community with offices, but more than simply offices, at its heart is something that we were considering at Apt as long ago as 2013 when our Longwater Avenue project was in its infancy.

The early ideas for this project had the spaces in front of the office buildings themselves as community hubs. One of our first drawings included flexible green spaces for weekend markets, sport and leisure, reimagining the village green and cricket pitch, against the backdrop of our buildings. As the project progressed, this idea fell away, but it

has since re-emerged in recent sketches and imaginings related to future phases of the park, with hotels, leisure pavilions, creches and community halls, food offerings and small retail all co-existing alongside variations on the office workplace model, but importantly all feeding off each other to improve the environment, sense of place and desirability to be here in this ever-competitive market.

And business park buildings can make a significant positive contribution to tackling the climate crisis. Much of the 1980s and 1990s business park building stock is already becoming obsolete. By pursuing aggressive retrofit programmes using materials with low embodied carbon, business parks can set a new standard for holistically sustainable design that goes well beyond BREEAM and WELL certification and is more befitting of their landscape environments.

By providing a greater mix of uses and focusing on a meaningful, sustainable agenda that promotes health and wellbeing for their occupants, there is an opportunity to accelerate the idea of becoming more localised, drawing parallels with the idea of the ‘15-minute city’, where everything one needs is within a quarter of an hour, either by foot or bicycle. If business parks can become more self-sustaining then the current sight of building frontages being dominated by cars becomes redundant and the current challenges they face around location become less restrictive.

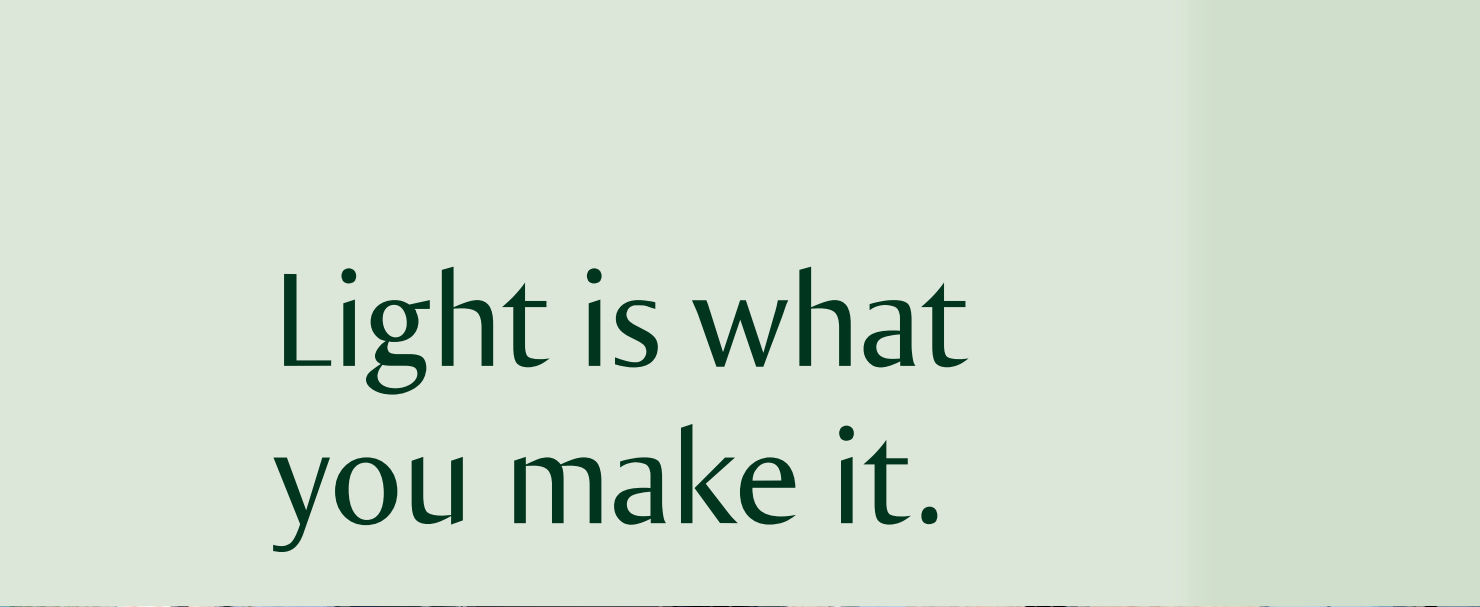
Without evolution, business parks will struggle, but they have great potential to create a much more positive identity, attracting a more diverse range of people over the next 10 years and evolving into small village communities in their own right, which can surely lead to lasting success. ●

James Ewen is project leader at Apt



The settings of business parks work in their long-term favour as at Apt's Longwater Avenue

RICHARD CHIVERS (2)



Light is what  
you make it.



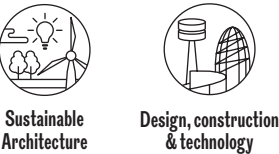
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# Retrofit reaches Stage 2

The project to upgrade the future home of the Cambridge Institute for Sustainability Leadership has got to Stage 2 of the Plan of Work, after last month’s report of Stages 0 and 1

Eleanor Young

At Stage 2 of the RIBA Plan of Work architects develop the conceptual design and it is signed off by the client. This is where we pick up the story of a 1930s telephone exchange that is undergoing a deep retrofit to become the new home of Cambridge Institute for Sustainability Leadership.

It is no surprise that the original design of the telephone exchange hadn’t prioritised daylight. ‘It was quite gloomy,’ says project architect Architype’s Ben Humphries. Light modelling from BDP, and some mini-studies looking at the impact of the windows on heat demands and daylighting, proved the old sash windows needed tackling. Good daylight is a must for BREEAM and existing light levels would have scored zero credits. Options included triple-glazing to achieve Passivhaus levels of insulation.

### Conservation vs sustainability

Cost and the conservation area put paid to widening the openings. Architype chose the less radical, but still contentious, solution of replacing the sash windows with recessed frames, cutting out transoms and mullions and, in the process, allowing internal wall insulation and windows to sit flush, avoiding a complex thermal detail. Pitting conservation against sustainability is a very live issue, all the more so in a historically rich city like Cambridge. Architype found its presentation of findings and proposals to a gathering of colleges watched closely for the planning outcome: they knew the wider significance of a ruling either way. In the end (to jump ahead a stage) the scheme won five votes to three on

The circular economy is a difficult one to crack, even when you are just looking for waste

the planning committee with support from some councillors for its sustainability agenda. But back to the fabric. Surveys started to give a greater understanding of what the team had to work with. Point testing of U-values gave some information but thermal imaging was less useful as the heating had been mothballed so there was little heat leakage to pick up. It was clear, though, that areas retrofitted in the late 90s performed better thermally. Ironically, it was harder to make this section – with its steel and precast concrete – airtight.

Refinements of the model in the Passive House Planning Package (PHPP) identified small power as an issue. This took the design team beyond the normal purview of architecture and into everything that CISL plugs in, particularly computers. Inevitably, that developed into continuing discussions about upgrades, replacements and server location. Hosting the server at the university’s data centre could have made the Passivhaus target far easier to achieve, but it didn’t work for CISL’s team.

Another piece of software was doing some detailed analysis. Quantities from a SketchUp model of the exchange were plugged into ECCOLab – software developed by Architype, engineers and asset managers to opti-

mise lifecycle energy, embedded CO<sub>2</sub> and life cycle costs. The figures proved the importance of tackling embodied carbon in floor finishes. ‘We’d have had an idea of that but not the numbers,’ explains Bishop. ‘A generic carpet tile would blow the carbon budget.’ So the raised access floor was left exposed, the glue buffed off to provide a clean surface.

### Searching for waste

University waste streams were also explored. If the projects’ progenitor, the Enterprise Centre at the University of East Anglia, had rescued and repurposed a Foster and Partners-designed desk, what riches might be found in Cambridge? Talk of using timber that was being felled on the university estate didn’t come off. As ever in design, many avenues were explored but not all led somewhere. The circular economy is a difficult one to crack, even when you are just looking for waste.

CISL had initiated the building process and embedded itself into the project far more firmly than a normal university department, which would attend meetings as a user rather than project director. But as a professional client the university has its processes. When the project didn’t follow its design and standards brief a ‘derogation’, or variation, had to be agreed at the project engagement meeting held at the end of each stage. Talking to both Architype and project director John French you sense a mix of defiant eco warrior and quaking school child as the rule breaking was justified. There was a palpable tension in pushing sustainability when innovation and guidance conflicted – even though the university already had at least one timber framed Passivhaus building at King’s College.



An early stumbling block at the project engagement meeting was the use of bio-based materials – specified in the brief but specifically ruled out in the university design guide. Then there were the partitions, fixed in place and on the keep list, but not meeting the mandate for future ease of reconfiguration. They were eventually ditched. Passivhaus fundamentals also had to be run past the group; using low grade heat around the ventilation system was a deviation from the norm and needed approval.

In the meantime there was the perennial question of the cost of sustainability. French says the cost consultant added 20% for every

There was a palpable tension of pushing sustainability when innovation and guidance conflicted

performance criteria – which had to be resisted. ‘Yes there are costs of extra insulation and triple glazing, but it doesn’t mean it is a free for all piling on cost and risk,’ he says. There was only one air source heat pump, for instance. And French could see potential savings too, one of which was realised in the flooring – the cheaper solution of reuse the result of the quest for low embodied carbon.

Whether these ideas could be realised or would fall at tender stage to cost and programme still had to be seen as the institute and its client-side team started to draw up what they needed from the team that would deliver the project on the ground. ●



# Why we must digitalise

Practices are turning to data-driven processes for project intelligence. A RIBA J seminar in association with Deltek found out why



The National Children's Hospital of Ireland in Dublin by BDP. The world-class hospital with associated research and innovation centres exemplifies the need for project delivery data systems.

In the last year, adoption of digital has taken a quantum leap. Businesses worldwide are investing heavily in digital technologies and transformation of their processes. Without the same acceleration in architecture, though, there is a real danger the profession will lag and lose ground.

At ‘Digital Transformation and Project Intelligence in Architecture’, a RIBA J webinar in association with Deltek, three speakers reflected on how a data-driven digital transformation, centred on project intelligence, is critical to architecture’s future success.

The speakers were: Adrian Malleson, RIBA’s head of economic research and analysis; Megan Miller, director of product marketing at Deltek; and Alistair Kell, BDP’s principal and chief information officer.

For architects, Covid has been a rollercoaster ride. Since the first lockdown in March 2020, practices have gone from pausing and cancelling projects and furloughing staff to focusing on managing growth and recruiting staff.

But despite the optimism, it remains a mixed picture. Practices say fees and

project costs have never been under greater pressure. In the UK, this is exacerbated by increased materials costs and shortages.

Although these issues need digital solutions, practices have been slow to respond. While architects often embrace digital design software, there is less advanced use of data-driven processes for project intelligence – tracking project costs, risks, schedules and workflow for financial management and business performance.

### Scanning the horizon Adrian Malleson, RIBA

Malleson kicked off with an overview of the economy, construction industry and architecture market drawn from recent data. As he stated: ‘We can only have insight into what’s going on by looking at the data behind it.’

He highlighted the Bank of England’s prediction of a buoyant economy, which is anticipated to reach pre-pandemic levels by the third quarter of 2021 and return to year-on-year growth thereafter. Already, construction ‘output per month [is] what it was, or thereabouts, before the pandemic’.

This upward surge is in strong contrast to the closing down of the economy in spring 2020 ‘when the decline of construction by 12.5% in 2020 effectively knocked off four or five years of previous growth’.

The combined result of the recovery of the economy, construction industry and architecture market is epitomised by the RIBA Future Trends Survey, which gave a positive workload index score of +30 in May 2021 – the highest since 2016. It ‘speaks to a strong market that architects are well placed to take advantage of now’, he said.

Malleson presented this promising view with clear caveats, however. Whereas the housing sector is booming with a workload balance of 45+ ‘the commercial, community and public sectors are much more subdued – a little more fragile’. Growth is being driven by affluent homeowner clients, who have saved money during the pandemic and are refurbishing their homes to be better suited to online working.

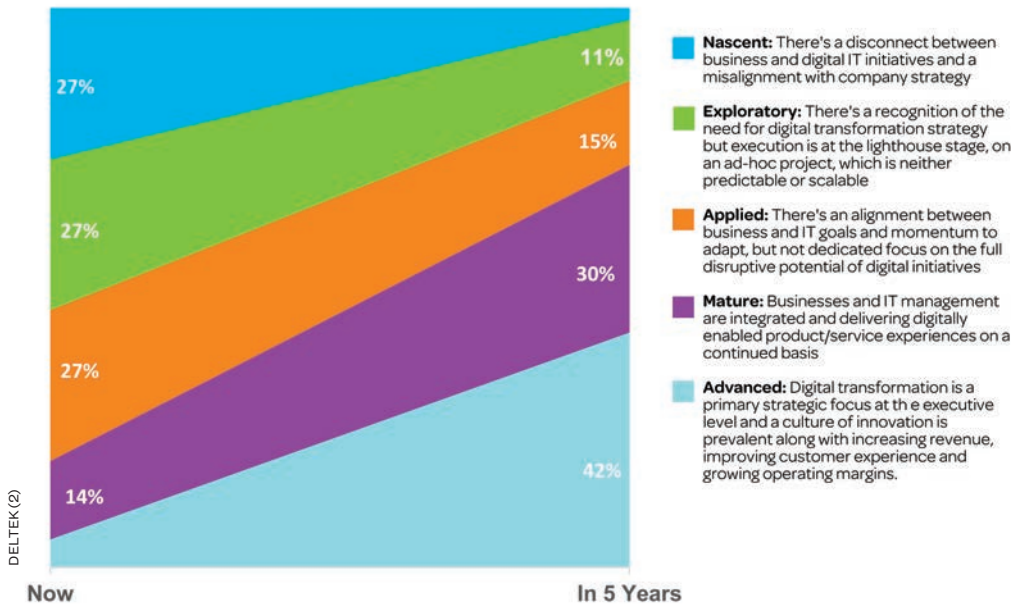
The significance of other sectors’ more subdued performance was underscored by the RIBA Benchmarking survey that showed that in terms of revenue housing only made up 28% of income of RIBA Chartered Practices in 2019. With one-off houses and extensions becoming less important as practices grow in size, large practices and medium-size practices are focused on mixed-use, commercial, healthcare and education sectors. It is yet to be seen what impact the slower recovery of these sectors will have on larger practices, with the majority based in London (67% of practice revenue came from London in 2019). Malleson indicated that early anecdotal evidence suggests a different less London-centric future as individual architects and practices move out of the capital drawn by a more attractive and affordable lifestyle.

### Deltek Clarity industry report highlights Megan Miller, Deltek

In her summary of the findings of the latest Deltek Clarity report, Miller revealed a picture of an industry that is only just embarking on digital transformation. She tellingly divulged that out of the 600 architecture and engineering firms surveyed: ‘Most businesses indicated they are mostly or somewhat reliant on manual data in spreadsheets.’

Most architectural firms (54%) are at

The digital transformation maturity spectrum



the exploratory or nascent phase of digital transformation, with a mere 19% at the mature or advanced end of the spectrum. There has been a marked increase, though, during the last year in the number of practices taking important first steps as the lessons of the pandemic have led businesses ‘to expediate and move more quickly’.

Top technology initiatives confirm that practices are still in the early stages of adoption, focusing on creating a strategic plan for implementing technology, developing budgets, identifying business partners and hiring or reskilling staff.

The poor performance of projects in the UK – with only 36% on or under budget and 32% on or ahead of schedule – ‘suggests that business processes might be getting in the way of successfully managing projects’. The major challenges are collaboration and communication and accurate cost and timeline forecasting.



Miller emphasised strong inter-dependencies between project and business management, where architectural practices are seeking to streamline billing processes, focus on business process improvement, manage growth better and implement new financial systems.

The current post-Covid onus on resetting and improvement provides the perfect ‘chance to evaluate where you are, where you want to be and use the opportunity to have meaningful conversations across the business. The digitalisation and automation of processes should allow architects to focus on what they do best.’

### Data driven futures: an architect’s view Alastair Kell, BDP

In his presentation, Kell highlighted how BDP is using its digital systems to go beyond financial management by improving project and business efficiencies. A digitally mature business, BDP has used Deltek for five years to provide core functionality. Individual timesheets are fed directly into the system by its 1250 employees across the world from either work computers or mobile phones, enabling the accurate resourcing and financial monitoring of projects. The use of data is being tailored to BDP’s internal processes, such as the live ‘Decision to Bid’ documentation, which requires appropriate approvals before projects can proceed.

User-friendly graphic representations of data views are also being created to visualise

project forecasting and financial checks for month-end figures and for the creation of a planning health dashboard, which identifies key issues with project resource plans across projects company-wide.

Progressing further, BDP’s information management strategy is being employed to embed the practice’s commitment to the government’s core priorities outlined in the Construction Playbook – health and safety and wellbeing, building safety and Build Back Greener – within their project processes. This is: ‘All about data for smarter more determined outcomes.’

Linking multiple databases to obtain additional metrics, quality assurance compliance is being used to identify a number of key processes that each project has to run through. The four key metrics are applied to provide a measure of confidence for auditing: business management, design process, environmental, safety. They reflect BDP’s commitment to determining outcomes through data, connecting them across the global practice from a strategic to a project level.

### A digitally literate future

One questions posed during the closing Q&A was ‘what advice would you give a student wanting to build their digital literacy?’.

‘Coding, generative design and understanding the difference between a spreadsheet and a native database would be invaluable to anyone coming into the industry,’ responded Kell. ‘Despite the drive for BIM adoption over the last 10 years, we are only now starting to understand the value of the data within the model.’ ●

‘Digital Transformation and Project Intelligence in Architectural Practice: A RIBA Journal and Deltek Webinar’ was broadcast live on 22 June. It is available now to view on demand: [ribaj.com/digitaltransformation](https://ribaj.com/digitaltransformation)

The Deltek Clarity report can be downloaded via the QR code or at [deltek.com](https://deltek.com)

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# 3: Culture



James Reeve says this image is the right way up; and considering the lengths he went to to take it, I'm not going to argue. The pool is at Villa 356 in the Côte d'Azur, designed by Rudy Ricciotti for art collector clients in an isolated, rambling landscape, along the coast from Reeve's adopted home in Marseille. Commissioned to document Ricciotti's work after his Department of Islamic Arts at the Louvre in Paris, Reeve was struck by the singular qualities of this futuristic, one-storey, black concrete villa – mostly by its 'phenomenal' 44m long pool, columns rising from it to meet a gravity-defying roof, oversailing its long glass elevation.

By contrast, gravity was used rather than foiled when he returned in 2017 to take this shot. Reeve loves capturing buildings at twilight using a long exposure, and did so here. To counter the significant buoyancy of his camera's waterproof housing he anchored the tripod with gym plates to the pool's floor. Reeve himself, almost immobile for hours in 12°C water, wore three wetsuits, and to stay steady at the viewfinder, tied a bag of rocks to his belt to bear him down. And to ensure the water's surface was as calm as he needed it to be, he'd hold his breath, descend, wait, open the shutter, wait, close the shutter, then haul himself up. Only then did he exhale.

So much effort to ensure that your presence was nullified, not even by inference; observe even the absence of shadows. This was moonlight on a cold spring evening, its sunless ultraviolet lending a sense of the uncanny to the strange serenity of the inverted. ●

Jan-Carlos Kucharek

**James Reeve**  
Villa 356, Bandol, Provence  
2017



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*'Electric cars may play a part in  
creating active structures'*



## Batteries recharge the green transport debate

If batteries can bridge the gap between power and mobility in transport systems, what could they bring to buildings?

Did you see the hydrofoil surfboard flying down the Thames in front of the Houses of Parliament? It was the next best thing to a flying carpet, complete with an Olympic snowboard champion riding out the wash of passing Thames clippers.

Dig into the technology and you see the propeller beneath the surface. Follow the YouTube trail and you see the lithium-ion battery strapped inside. Batteries have already powered a communications revolution with mobile phones. And it is becoming clearer that they could offer a fundamental shift in mobility and away from fossil fuel.

Everyone's eyes are on the transport possibilities, possibly electric planes but particularly electric cars given the UK deadline of 2030 for an end to the sale of new petrol and diesel cars. But the original leader in electric cars, Elon Musk and Tesla, early on realised the value of batteries for buildings as well as cars. Tesla launched its slim Powerwall in 2015. Now Samsung, Nissan and others have 'home batteries' on the market. Electric cars may play a part in creating active structures, powering a building's devices as well as charging from PVs, and helping better use energy from renewables at grid level too.

The costs of such batteries are currently measured in thousands of pounds (starting around the £2000 mark). Across the world, in universities and research labs, there are trials for more powerful, lighter, longer lasting, less polluting battery technology. It should make them cheaper too. In June the UK government pitched in with investment that includes £22 million for the Faraday Institution, which brings together academic and industry research on batteries from a decommissioning atomic energy research campus in Oxfordshire.

In the meantime, lightweight batteries are fuelling a smaller scale revolution in personal

transport. In recent years they have given us effortless uphill pedalling (without outstanding muscle power) on e-bikes, vast improvements in electric wheelchairs and, since June in London, e-scooters for hire. And London is not the only city with e-scooters; Manchester is trying them out in Salford Quays and Rochdale, and the West of England Authority is trialling them at campuses, train stations and in city centres. As they are classified as vehicles, local authority trials are the only way to ride them without being on the wrong side of the law.

In 2019 e-bike sales were up 40% year on year to 100,000 and in 2020 e-bike sales rose 70%. Perhaps e-bikes and e-scooters will force the pace of change in creating dedicated infrastructure. They will certainly extend the 15 minute city and, anecdotally, e-bikes are already giving those in villages and outlying areas a new freedom and pace for navigating local lanes and reaching services.

While the hydrofoil surfboard looks like it will remain an extreme sport, the battery power of e-scooters and e-bikes are driving a lower-carbon, joined up transport system. Batteries will shift how we think of energy and buildings too. ●



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PORTRAIT: STEPHANIE WUNDERLICH

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## Culture Opinion



# The sensory city

The radical practice of psychogeography could bring a renewed energy to urban planning, says Tszwai So

A giant mural featuring a windmill on a flank wall beckons me forward and, as I continue my journey, I encounter a floral scent trailing over a row of Edwardian terraced houses. I wander further, the tintinnabulation of a distant church bell lures me to proceed onwards ... I meander around my locale, free from the obligation to navigate the city with a purpose. I allow my senses to guide me forward instinctively, wandering and feeling my way through, and in so doing, I am able to lose myself in the urban landscape in the same way I immerse myself in an orchestra performance.

No doubt the practice of psychogeography is subjective rather than scientific. It never observed any precise laws governing the specific effects of the geographical environment on the emotions and behaviour of individuals, as claimed by its eccentric proponent Guy Debord, who coined the term in the first place. Psychogeography was a well-intentioned but somewhat naive endeavour to understand how different places make us feel and behave. While it inspired an array of artists, writers and filmmakers worldwide, no architects or town planners seem to have ever taken it seriously. Perhaps its vagueness makes it a better recipe for creating enigmatic art which is an end in itself, instead of an informed design strategy. Indeed, if walking the city aimlessly is psychogeography's ultimate goal, it would be paradoxical to imagine it could be of any practical use to architects.

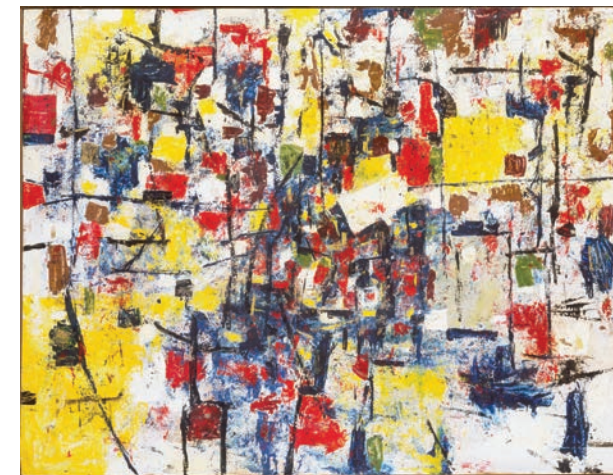
In order to fully appreciate the legacy and relevance of psychogeography in urbanism, it is crucial to understand the intellectual underpinnings as well as the anti-capitalist origins of the Situationist International from the 60s – the movement from which psychogeography sprang. One of their most radical ideas was to liberate our minds from the limitations of consumerist homogeneity. The functionalist and utilitarian town planning approach is the outcome of the market's invisible hand, whereas the mesmerising psychogeographical maps tear apart our conventional understanding of urban spaces, setting out a subjective emotional dimension to our relationship with cities.

Every psychogeographic map is unique because it manifests its author's subjective reading of the city, as we see in British situationist Ralph Rumney's works. Through his spellbinding maps we learnt that urbanism is about more than built environment; it is about the people in the city. The situationists sought an emotion-based urbanism and so should we.

Filmmaker David Lynch once told an audience: 'If you have a golf ball-sized consciousness, when you read a book you will have a golf ball-sized understanding.' An artist's job is to expand that consciousness, and we learnt from the situationists that experiencing a city is highly subjective and involves the whole body; it is poetry in motion.

Alas, codification remains the orthodoxy well into the 21st century in planning policy. Technocrats are obsessed with regulating space standards, building heights and even 'beauty' – but how can we codify subjective experiences of our city? The lazy assumption that one can tabulate our lived experiences can be explained by capitalism's *raison d'être*: the commodification of everything – which ensures we maintain a golf ball-sized understanding of urban spaces. Psychogeography can certainly bring renewed artistic energy to urban planning and architecture, dismantling architects' overt reliance on the visual and an almost authoritarian attitude that we know better than anyone else about how people feel about their cities. In psychogeography we rediscover the most innocent, sensuous and visceral interaction with our built environment. ●

Tszwai So is a founding director of Spheron Architects



RALPH RUMNEY, THE CHANGE, 1967. THE ESTATE OF RALPH RUMNEY. PHOTO TATE

**PUT IT INTO PRACTICE**  
Perhaps next time before architects conduct any conventional site analysis and massing studies, they could consider wearing a different hat and taking to the streets to map out their sensory experiences of the place?



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## How should we read Banham today?

The ideas of renowned critic and theorist Reyner Banham belong to a different age, but he remains an iconic figure, writes Stephen Parnell. A new biography asks how to make sense of him now

**Below** Reyner Banham riding a Moulton bicycle in London, 1963.



The British architecture and design historian Peter Reyner Banham recalled the 1970 International Design Conference in Aspen as the most bruising experience of his life. His discomfort began when on the last day of the conference French delegates – led by Jean Baudrillard – complained that in espousing naïve faith in the ability of technology to construct a better tomorrow, he, personally, had ‘clearly shown the moral and technical limits and the illusions of design and environment practice’. Attending students then issued an 11-point resolution challenging design’s complicity in social injustice and extractive practices that were destroying the planet in the name of profit. A bruised Banham wrote to his wife later that evening, ‘I shall not soon forget the hostility vibes that were coming up from the floor’. Recounting this episode in his fascinating new study of Banham’s life, Richard Williams presents it as a turning point – a kind of mid-life crisis. ‘Having been accustomed for nearly 20 years to being the provocateur’, Williams writes, ‘here he was cast as the voice of the establishment’.

The conference and Banham’s part in it clearly resonates with the crises that – incredibly – we are still living with half a century later. As William notes, Banham’s oeuvre is colossal – ‘anywhere between 750 and 1000 articles, depending on whose account you read, and up to 16 books’, each one adding to the myth that ‘there were always technological fixes... the “boffins” always had a solution, the humans would always come out on top’. There is no doubt Banham was a complicated and contradictory character. An intelligent, erudite, straightforward communicator and cultural interpreter, he was the Marlboro man of architectural criticism. However, his unshakable belief in technology and the Enlightenment ideals of progress and scientific rationality underpinned his world view and writings. The quintessential voice of 20th century ideas, he was one of the primary problems younger generations must now deal with. This is how his early works should be taught today.

The self-proclaimed aim of Williams’ book is to ‘make sense of Banham now’ – a difficult job considering his prolificacy and the fact that there is little in the archive at the Getty Center that isn’t already in the public domain. (Having no sense of his own legacy, as his daughter explained, ‘he burned everything’). But hang, on, didn’t Nigel Whiteley do this almost 20 years ago in his bigger, deeper critical investigation, *Historian of the Immediate Future*? Or Todd Gannon, more recently, in his majestic *Reyner Banham and the Paradoxes of High Tech*? They are similar, but whereas Whiteley’s is closer to an intellectual biography, and Gannon’s focuses on Banham’s later works and relationship with buildings approaching High Tech, Williams’ is



more a re-evaluation of the man and his position in architectural historiography today. It is a book-length expansion of a chapter on Banham in his and Mark Crinson's 2019 *The Architecture of Art History*, itself an overdue evaluation of the overlooked and awkward relationship between art and architectural history.

Banham is still a popular, even iconic figure in architecture. We all have our own image of him, each one easy to turn into a cliché, whether the futurist in *Theory and Design in the First Machine Age*, the New Brutalist or Megastructuralist, or – translated trans-Atlantic – the tourist in Los Angeles, the services engineer in a Well-Tempered Environment, the 'desert freak' in *Scenes in America Deserta*, or the connoisseur of concrete in Buffalo. What *Reyner Banham Revisited* does best is to explain, almost psychologically, each of these personalities in the context of his life and career, getting behind the bombastic bamboozlement, sassy straight-talking, 'fashionable sonofabitch', and erudite masculinist public performer, and leaving the reader with a rich sense of a man with ideas and what they mean today.

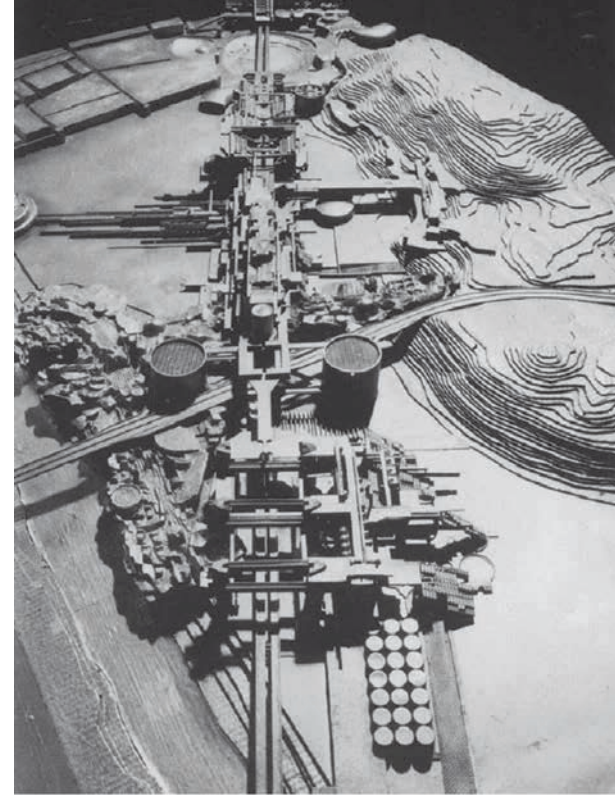
Perhaps the least explained of Banham's major books in this volume is *Megastructure: Urban Futures of the Recent Past*, a facsimile of which has just been published with a new introduction by Gannon. It's a very crisp and faithful reproduction, and the orgy of black and white photos pops brightly from the page. Like *The New Brutalism*, it starts with a definition: a megastructure is a massive, long-life extendable ('plug-in' or 'clip-on') structural framework that houses individual prefabricated units constituting all the functions of a city.

It then documents candidates for canonisation, from Sant'Elia's Milan Central Station project to the Metabolists, Archigram, Moshe Safdie's Habitat at

**Right** Urban Structure project by students of Leonardo Savioli, Florence, 1966, reproduced in *Megastructure*.

**Below** The Tricorn Centre, Portsmouth, built by the Owen Luder Partnership in the mid-1960s and demolished in 2004, is featured in *Megastructure*.

Reyner Banham  
Revisited by Richard  
J Williams. Reaktion  
Books, 2021, HB,  
296pp  
*Megastructure: Urban  
Futures of the Recent  
Past* by Reyner Banham.  
The Monacelli Press,  
2020, HB, 232pp



CEMENT AND CONCRETE ASSOCIATION

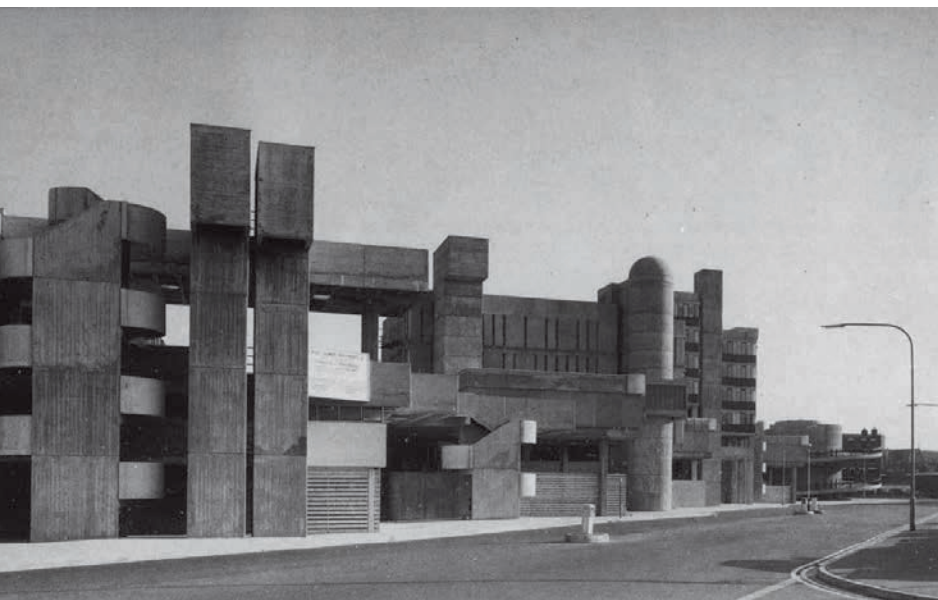
Expo '67 and Paolo Soleri's Arcosanti: self-contained, self-sufficient spaceships that could land on any planet and spawn a new colony powered by a technoutopian belief in human ingenuity and charisma.

Most interesting is an epilogue where Banham ponders the 'meaning of megastructure' as it was about to be delivered in the Centre Pompidou. He declares the movement over, closing the debate down rather than seeing it as the opening gambit for others to respond to. 'The concept was faulted right through by an inner contradiction that could not be resolved', he concludes, in typically contrarian fashion. Williams remarks that this 'was a melancholy but apt metaphor for the state of the modern movement, as well as perhaps for Banham himself'.

So what might we learn from Banham today? Perhaps I appear too harsh in my judgments, based on the early material that I am most familiar with. Williams' book helped me to appreciate the post-midlife crisis Banham, the more reflective, grown-up thinker, coming to terms with being considered the establishment to be rebelled against, while still doing his own thing, still desperately seeking the next disappointment. Banham never lost his enthusiasm for experiencing buildings, but by the end of his life had come to terms with an expanded field of architecture; that architectural history was 'not just a "set of actual monuments", as Williams notes, but 'also a "set of actual books" and "a set of actual historians".' Who knows what he would have made of the crises that face us today, but I like to think this softer Banham would revisit his earlier high-modernist works, conclude that it was over as a movement, and cheer on the ideas proposed by those critics from the 1970 IDCA who advocated a different kind of architecture *autre*. ●

Stephen Parnell is an architect and historian of post-war architecture

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Culture  
Eye Line drawing competition

# The power of drawing

Eye Line entrants bared heart and soul in impassioned, thoughtful images

With a formidable judging line up of respected architects, artists and academics it was clear from the outset that the judging process was going to be a challenging one. The 303 initial entries had been whittled down to 54, and from these the winners were to be chosen – but with each judge fighting their specialist ground, this ninth year was, more than usual, dominated by horse trading.

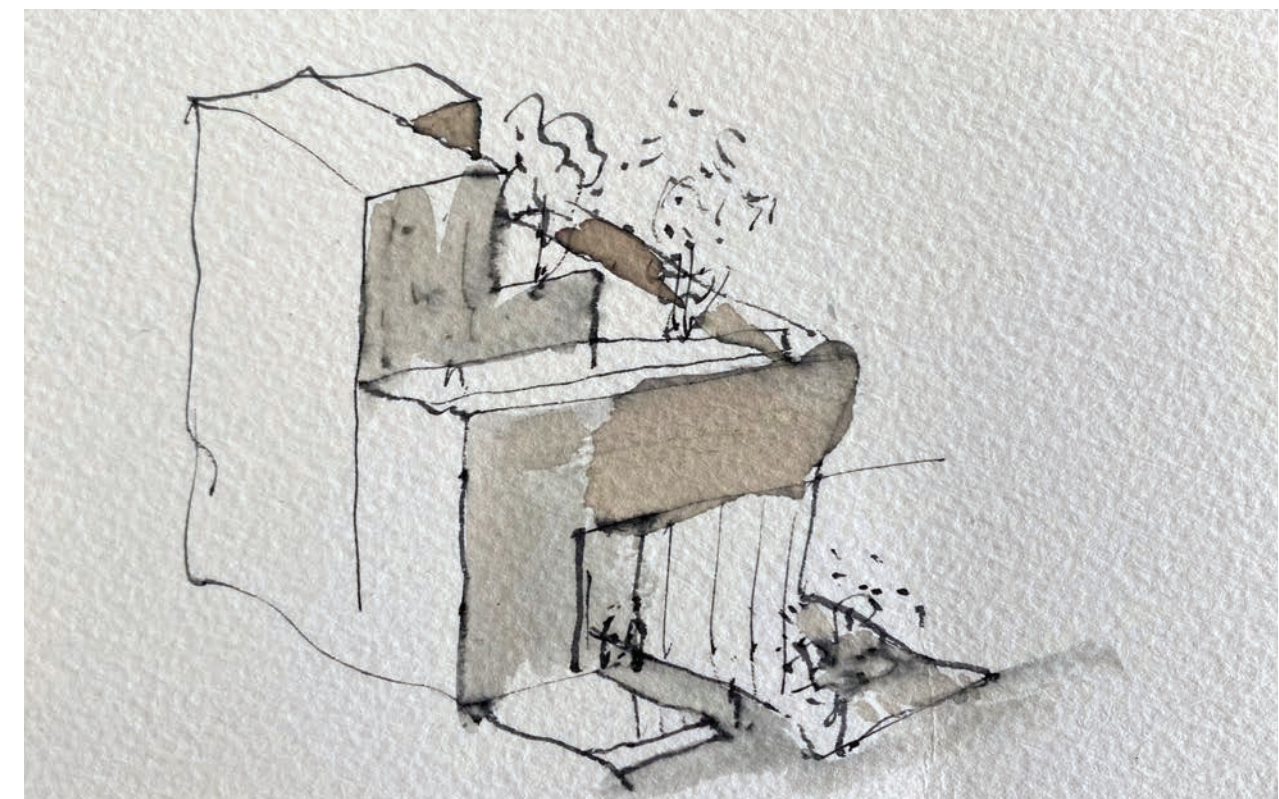
‘In general, I prefer the entries that I know I would struggle to draw myself – not just the product of a good model or skilful rendering’ said Bartlett professor Laura Allen, but hers was one opinion among many. The academic Neal Shasore was driven more by the way the drawing manifested aspects of the written project narrative, while artists Ben Langlands and Nikki Bell, whose ‘art examines human relationships from the personal to the political by exploring the structures we inhabit’ were keen that it be the drawing itself that spoke rather than any accompanying text. Respected architect Eva

Jiříčná, in a spirit of openness and optimism, merely sought architectural drawing skill, without agenda.

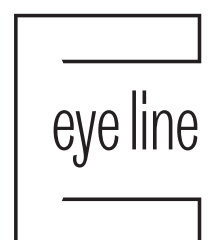
The only slam dunk this year would be our 2021 student winner; in every other case – including the practitioner winner, championed by an intransigent Langlands & Bell – rankings were only agreed after much heated debate and bartering of judges’ preferred entries. And this proved difficult because the general bar – especially in the student category – is now so high. At the end of the judging, Allen couldn’t help but observe ‘the schism between all the technologies students throw at their work’ and the generally reactionary drawing methods of practitioners, and wondered why that was. Shasore challenged her view, arguing that student work left architecture in an isolated position, divorced from reality. But Jiříčná’s pragmatism brought the whole discussion back down to earth: ‘Perhaps you just don’t have time to do such beautiful drawings in the office.’ ● Jan-Carlos Kucharek

## EYE LINE 2021 JUDGES

Laura Allen Professor of architecture and augmented landscapes, Bartlett School UCL  
Eva Jiříčná RA Architect, co-founder AI DESIGN  
Benedict Langlands & Nikki Bell Artists, Langlands & Bell  
Arinjoy Sen Student winner, Eye Line 2020  
Neal Shasore Head of school and CEO, London School of Architecture  
Chair: Jan-Carlos Kucharek  
Acting deputy editor, The RIBA Journal



Left Practitioner longlisted Ireland House Tokyo, with wine. 120x60mm Pen and red wine on watercolour paper postcard. Jane Larmour, Patrick Wheeler and Mark Arigho, ALWA Architects



ALWAARCHITECTS



**Practitioner: 1st Winner**  
**Rory Chisholm**  
Donald Insall Associates

Rory Chisholm has a thing about courtyards, arguing that the typology has been developed for the last 10,000 years by a number of civilizations. Further back than that, in fact: 'It's easy to imagine that it comforted our ancestors to dwell in buildings that resembled a simple clearing in the woods,' he tells us. But, he continues, it also has a new prescience: 'It lends itself to passive ventilation, to positive mental health, even to social-distancing. This isn't a coincidence; we discuss these concerns today, but they are fundamental to human civilisation.'

Chisholm's pencil and ink rendering is a courtyard proposition for Manchester — a whole city centre quarter made up of small, medium and large scale courtyard houses, linked together by a community courtyard, all set within the walls of one of the city's great Victorian courtyard factories; what he terms 'an interwoven micro to macro courtyard design.'

The jury enjoyed the cinematic scope of the rendering and Chisholm's methodology of handling it but it was Langlands & Bell who really championed it. Nikki Bell enjoyed its sense of the camera obscura: 'You can look far, around and down — from the cityscape you can zoom into the detail. It has a strong narrative as a drawing.' Benedict Langlands meanwhile thought it 'very imaginative with a good sense of context.' He revelled in the technique, adding: 'It has a lot of detail and feeling but is actually quite free, even when zooming in.' But all the judges appreciated its breadth and ambition as a drawing.

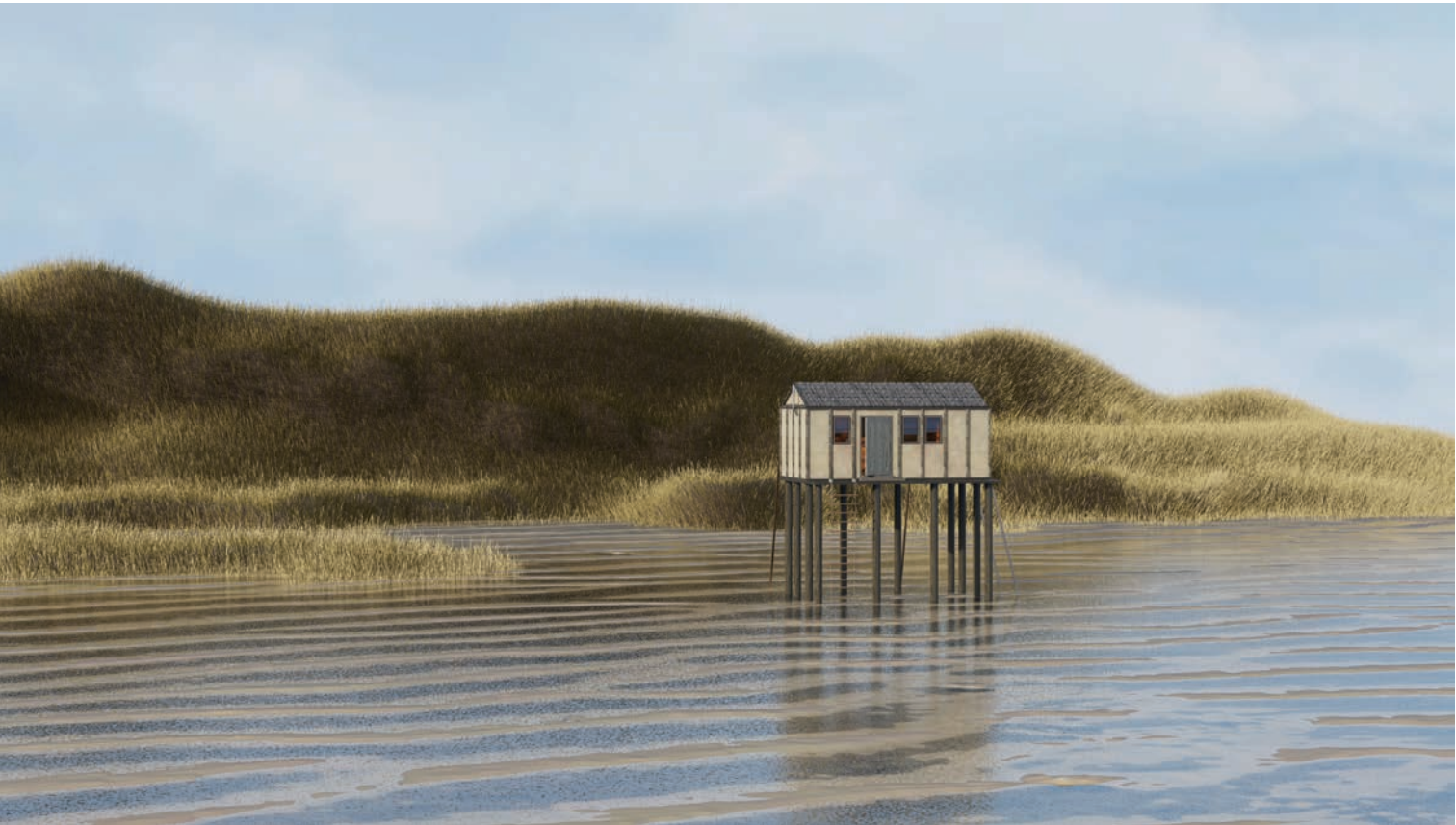
And, as with his limpid sketch of Decimus Burton's Temperate House at Kew, which earned him the category second prize in 2018, it's the fluidity of his pencil and ink style that secured him first prize here. Water and ink express how the building feels to us, as perceived by the body,' says Chisholm. 'This design is based on the architecture of the primal, of the body; and so the ink shines brighter.'

Small, medium and large  
scale courtyard houses, an  
interwoven micro to macro  
courtyard design

The Manchester Courtyards: a proposal for  
Ancoats. Pencil and ink, 560mm X 1120mm.







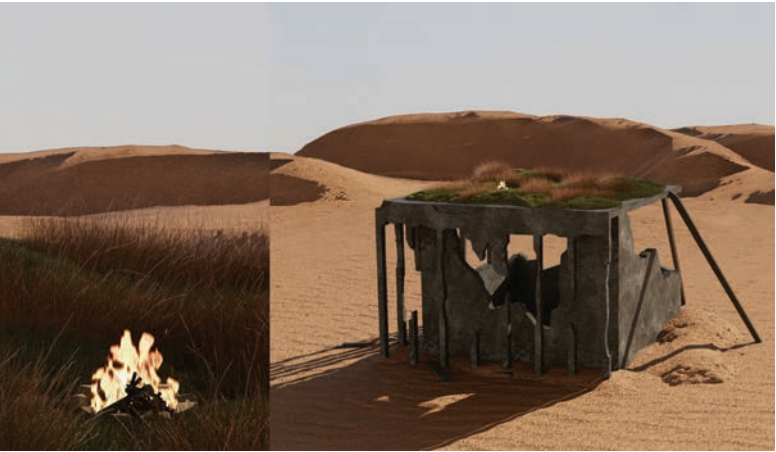
**Above** How do I stand tall?  
Digital render, 400mm × 700mm.

A rendered, surreal  
place I feel reflects  
my perception of self

**Practitioner: 2nd Winner**  
**Mel Galley**  
Independent artist and researcher

With her digital rendering 'How Tall Do We Stand?' our second-prize winner Mel Galley starts with a question: 'If I were a landscape, what would it be?'. It is, she says, 'a self portrait in the most abstracted sense; a rendered, surreal place constructed out of the elements of the landscape [that] I feel reflect my perception of self.' The dunes we see may curiously reference the Cumbrian coastline of Galley's past, but the house on stilts represents the fragility of the present and the precarious uncertainty of our futures set against the backdrop of an almost utopian landscape.

Galley's work proved a slow-burner in the practitioner category. While Laura Allen dismissed the work at first as 'text-book examples of things that are hard to render; grass, fire and sand, probably all done in a game engine,' over the judging morning, she would continue to return to it — and draw the other judges' attention to it. Neal Shasore took convincing, but Arinjoy Sen began to appreciate 'the plays on scale being what bring these images alive — it feels like a surreal expression.' And it was this component and the skill of how they were rendered, rather than the red herring of a narrative, that ended up convincing the rest of the judges. 'I like the ambiguity of the drawings' construction and how it shifts how we might understand them,' noted Allen. 'I don't mind that I don't know what I'm looking at; it's the fact they even draw you in to examine it.'



**Below** The snows are melted, the snows are gone.  
Digital render, 400mm × 700mm.

**Practitioner: 3rd Winner**  
**Dominic Murray-Vaughan**  
Feilden Fowles Architects

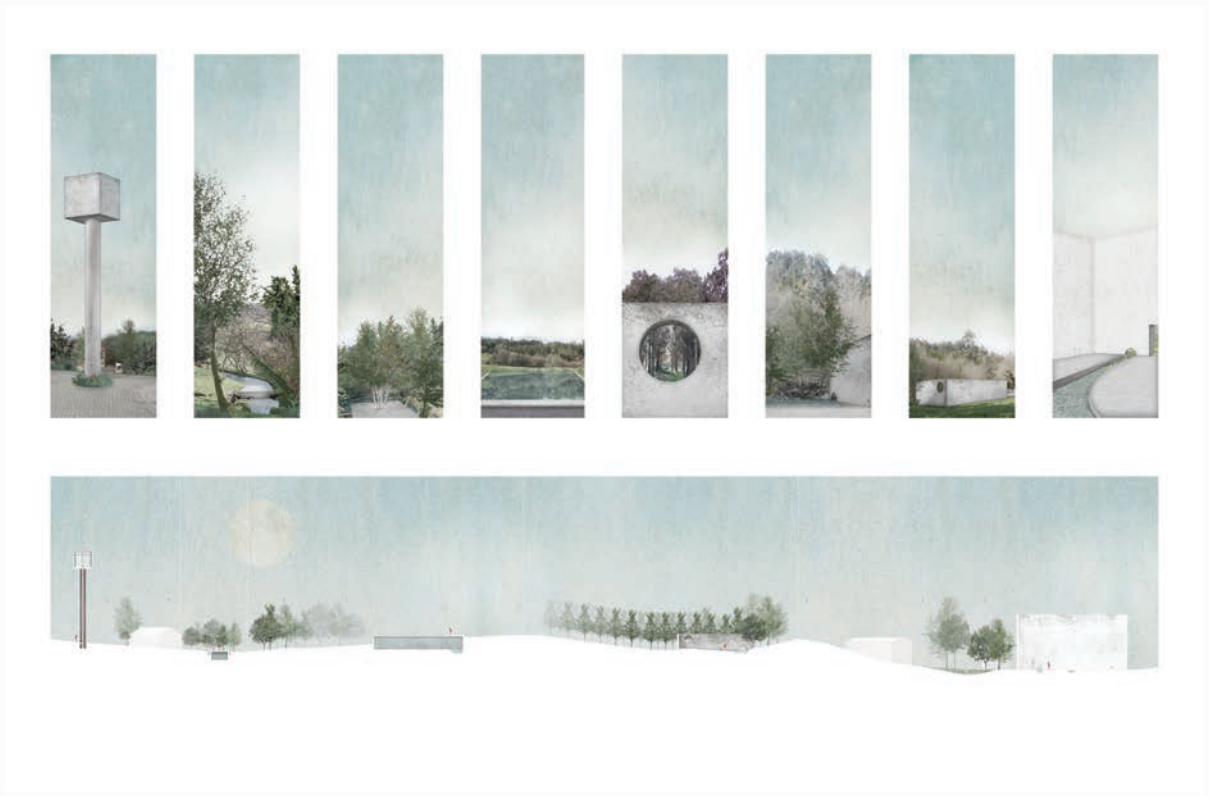
Dominic Murray-Vaughan's vignettes of spatial encounters at the Spanish town of Lavacolla, a symbolic site on the Camino de Santiago de Compostela pilgrimage route, charmed sceptical judges with their inscrutability. This is a famed bathing site due to the convergence of three rivers, and it was the image's delicate watercolour qualities that first caught the eye of the judges — before they began to question what they were seeing. Murray-Vaughan introduces curious, box-like follies into the frame, set against his rolling, natural landscape beyond. But what of these 'eerily empty' images is merely photograph here, and what has been drawn or painted?

The very fact that the judges couldn't actually tell, that the images almost defied interrogation perhaps, left them wondering at the delicacy of the intervention. Benedict Langlands felt them to be 'minimalist, restrained and elegant, with a beautiful sky — perceived as pauses on a route.' Laura Allen perceived them as 'pretty magic. It might be an image drawn over a photograph but it's actually difficult to say; it's very skilful'. Arinjoy Sen considered the interventions 'quite sublime'; and while Neal Shasore didn't warm to them, he nonetheless thought the work had 'conceptual sophistication.' So, flawed perhaps, but a captivating example of 'paper' fallibility.

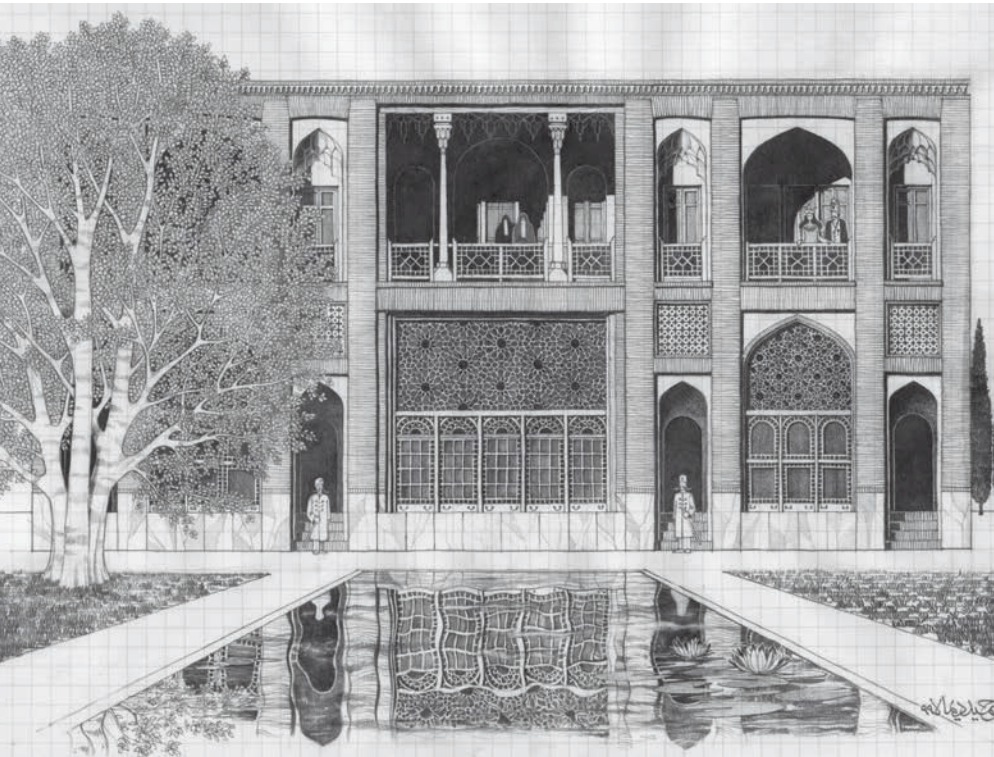
**Below** El Hórreo de agua.  
Collage, 300mm × 400mm.



**Left** Detail.







**Left** Utopia No.23.  
Pencil on paper,  
265mm × 200mm.

**Practitioner: Commended**  
**Hamid Zeayaian**  
Architect

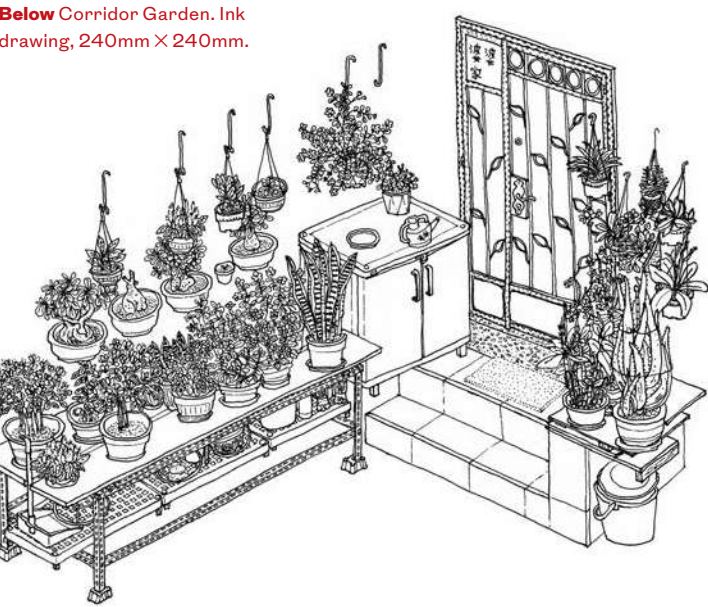
Zeayaian's detailed pencil studies, despite being imaginary buildings, have a Calvino-like sense of measured dreaminess — as if sited in some alternative reality running parallel to our own. The artist is as evocative in his words: 'Sometimes the architecture originates from form and concludes in form; sometimes, the inception of the architecture is in the mind and grows into the form. Occasionally, the architecture starts from the heart, travels through the mind and emerges in the form.'

Eva Jiříčná was impressed by them as a set, feeling there was 'real skill at work here — the windows and the trees are beautifully rendered,' and both Benedict Langlands and Nikki Bell loved the section through a vaulted undercroft. Arinjoy Sen felt it to be 'highly controlled work; the quality of reflection on the water is wonderful.' Ultimately, it was that 'one degree of separation' quality that drew the judges to the work and held them there, in what Langlands called 'its serene calmness.'

**Practitioner: Commended**  
**Jolene Liam**  
Studio Egret West

Liam received a commendation in the 2018 Eye Line for her obsessively observed 'exercises in banality'; a modern-day visual allusion to Xavier de Maistre's 'A Journey Around My Room'. This caught the imagination of the judges long before pandemic lockdown gave the work a devastating currency; so it is good to see her acknowledged in this year's cohort. Here, it is a return to Singapore to isolate, and the two-week quarantine it necessitated, that proved to be a rich territory for Liam's graphic musings. And it is both the room in which she quarantined and her grandmother's city council-built home, with its notional corridor garden, that feeds her imagination.

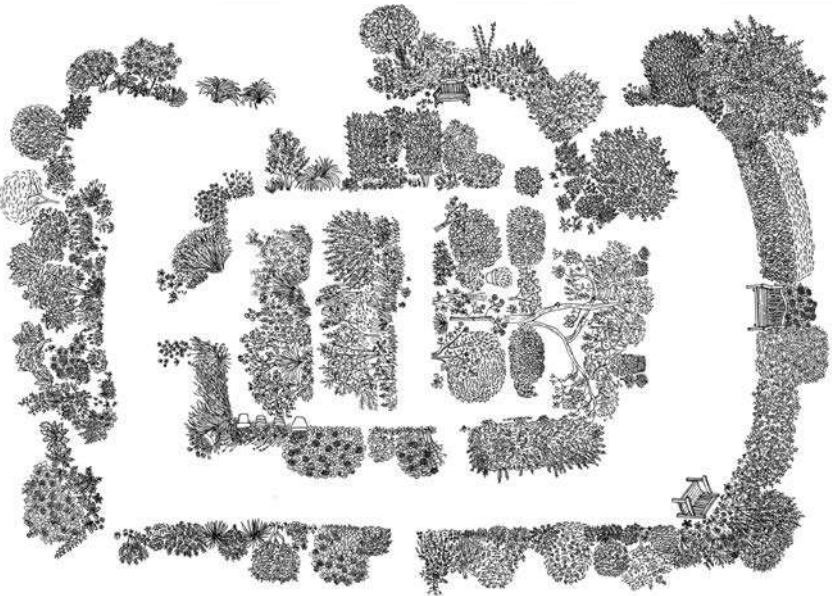
It was Neal Shasore who argued most strongly for her inclusion on the winners' list, seeing it very much as 'a meditation on the spaces around us and how they define our identity — and feeling very true to the moment'. And Arinjoy Sen loved the images, agreeing that they gave 'a sense of enclosure and a focus on spaces in between'.



**Below** Corridor Garden. Ink  
drawing, 240mm × 240mm.

## A meditation on the spaces around us and how they define our identity

**Below** Shared Garden.  
Ink drawing, 420mm × 297mm.



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**Student: 1st Winner**  
**Annabelle Tan**  
Bartlett School, UCL

Our Eye Line 2021 student winner’s reputation precedes her. Annabelle Tan was winner of the RIBA Bronze Medal in 2019; and as she enters her fifth year at the Bartlett, judging by what she presented to here, her output is going from strength to strength. Tan’s investigation of Norfolk riverscapes leads to a speculation that seeks to empower and employ local communities along its banks through the recreation of folklore as well as the generation of new rituals in a way that is both holistic and sustainable. Her proposal is not a single building but a paraphernalia of structures, objects and materials that revolve around the ecosystem of the River Wensum.

The aim is to create healing craft industries that contribute to the existing culture while cleansing the landscape and regenerating local communities. ‘River Rover’ moves downstream, settling, assembling and disassembling when ‘restoration’ has been completed and the landscape augmented; its arrival and departure marked by ceremonies.

All the judges – the Bartlett’s Laura Allen and Arinjoy Sen sat out due to conflict of interest – were nonetheless unanimous that Tan’s proposal should clinch first prize, staggered by the depth and rigour of her approach. Eva Jiříčná was deeply struck ‘by the visual power of her constructed narrative’. Nikki Bell, despite reservations over the ‘rose-tinted concept’, agreed they were ‘beautifully made images; well-observed, consistent and extremely skilled.’ Neal Shasore meanwhile, praised Tan’s work as ‘one of the few entrants aspiring to the clear sense of spatial narrative that most others fail to reach.’

Adding to the fascinating mix was Tan’s own Singaporean roots, layering traditional forms of Asian drawn representation onto the Romantic English landscape, resulting in a compelling mash-up of Song dynasty landscape traditions with Gainsborough and Sydney Lee; a multivalent complexity that made it this year’s stand-out winner.

**Above** Rural Futures along the River. Mixed media (pencil drawing and digital colouring), 400mm × 300mm.



**Top** An Ecological Mode of Ritual. Mixed media (pencil drawing and digital colouring), 950mm × 290mm.

**Bottom** Departure of the River Rover. Mixed media (pencil drawing with digital colouring), 950mm × 290mm.

One of the few entrants aspiring to the clear sense of spatial narrative that most others fail to reach



The paintings are romantic  
and nostalgic at the same  
time – almost Hopper-esque



**Left** The Courtyard.  
Oil on canvas,  
500mm X 600mm.

**Student: 2nd Winner**  
**Pu Zhang**  
Glasgow School of Art

In an interesting parallel with the thinking of our winner, Pu Zhang's work makes great currency of traditional Chinese representation in his fictional studies of the existing domestic typology of Chinese cities. Zhang's three oil paintings 'depict the sentiment and perception of the atmosphere' of the type, compositions brought forth from the memory, long after the hutong buildings of his imagination were replaced by modern constructions. But see how the colours, light, tone and texture evoke those memories, the paintings rendered almost in a gaussian blur, as if painted on blotting paper and on the edge of dissolution.

Eva Jiříčková, who has walked through these disappearing urban communities, felt the work was 'amazingly impressive in conveying a sense of place – something that's incredibly hard to do'; while Arinjoy Sen saw it as 'rooted in a very cultural medium of painting'. Neal Shasore, at first circumspect about the work's lack of a propositional quality, was won around by Langlands and Bell. 'The compositions seem lead you into the images,' they claimed. 'They are romantic and nostalgic at the same time – almost Hopper-esque,' added Bell.

Laura Allen picked up on the pervading sense of loss and melancholy, calling them 'charming and evocative of both atmosphere and environment'. And that sense of things slightly lost in the shadows, a proposition perhaps as yet unseen, was what won over Shasore in the end, conceding that they were 'charged with a sense of the uncanny.'



**Above** The Corner.  
Oil on Canvas,  
800mm X 1000mm.

**Left** The Sesame Mill.  
Oil on Canvas,  
550mm X 600mm.



**Student: 3rd Winner**  
**Andrew Riddell**  
Bartlett School, UCL

As a gay man studying 'queerspace', challenging the territory of the home as the site 'where hetero-normativity is most firmly rooted' goes to the core of Andrew Riddell's submission. In creating spaces for three specific queer characters, Riddell hopes to create his own 'bespoke queer domestic', employing visuals within his propositions 'linked to the notion that drag is the strongest visual act of queering the body.'

Shasore was sold on the texture of Riddell's statement supporting his work, calling his 'aesthetic challenging of norms conceptually strong and sophisticated'. Nikki Bell initially found the sheer outrageousness of the images 'over the top and clichéd' but, as she studied them more deeply, found herself drawn to his columns with a base of chrome platform heels and the technical skill of his kitchen roof's 'shimmering translucency.'

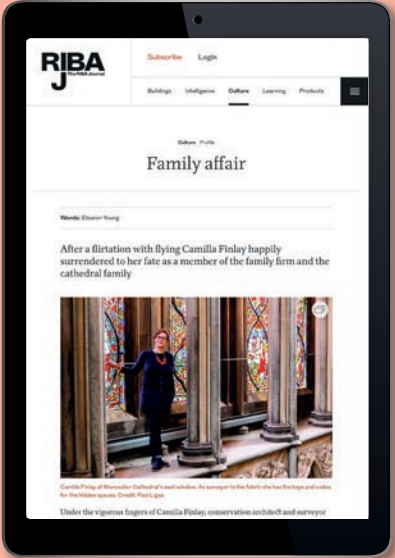
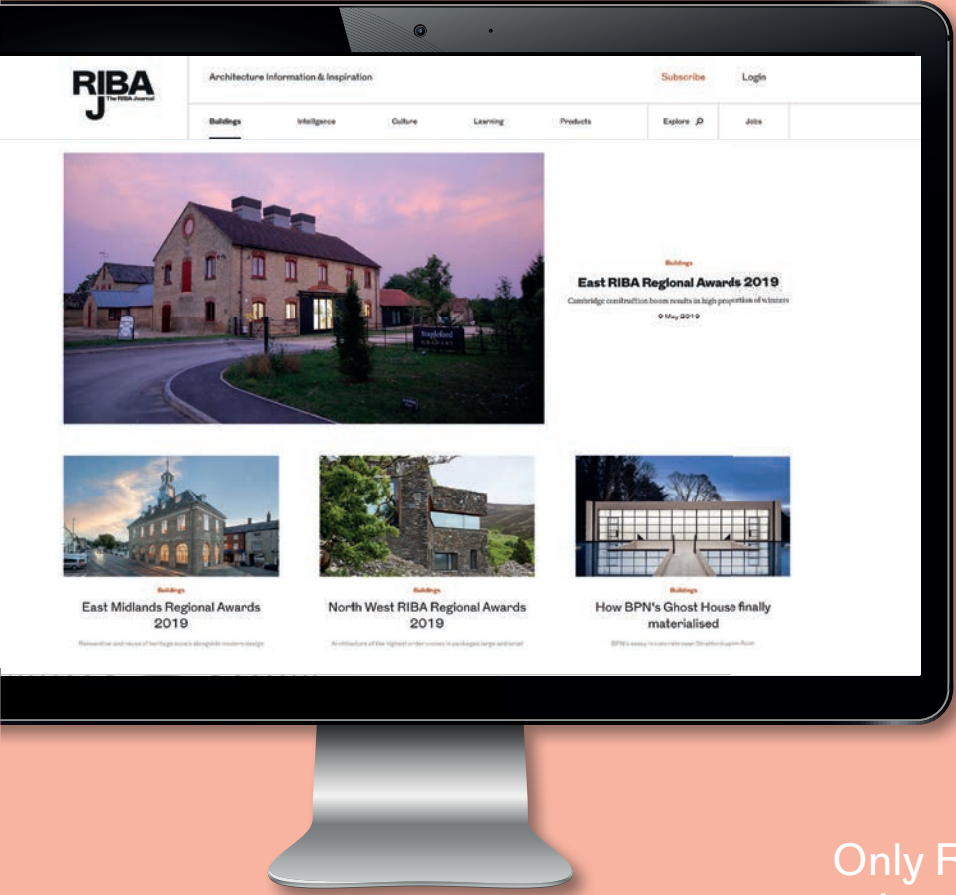
There is no escaping the explosion of queerness that emanates from Riddell's 'Elevation' and 'Queenie's Room,' but it was 'The Kitchen' that ultimately engrossed the judges, whose detail could be rewardingly zoomed into. With two main premiated winners coming from the Bartlett School, Shasore's remark that there will be eyerolls was countered by Jiříčná. Like Riddell's work, 'it's a provocation — architectural discourse should be about raising people's blood pressure now and again'.

Architectural discourse should be about raising people's blood pressure now and again



**Above** The Kitchen.  
Digital drawing,  
750mm × 1000mm.

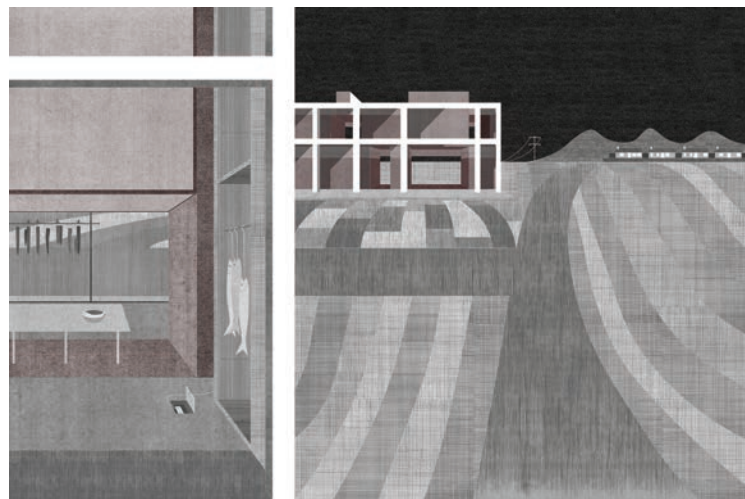
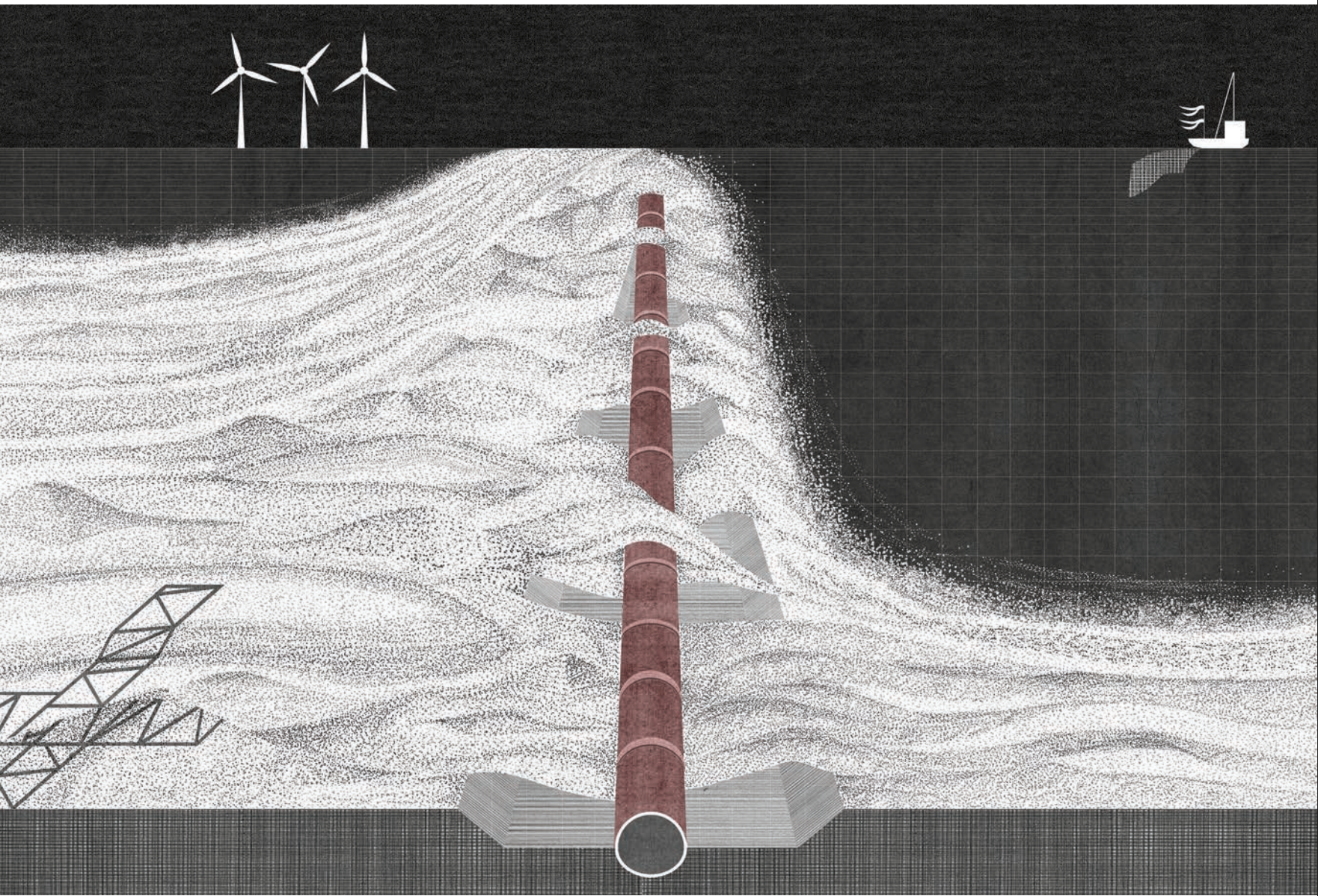
**Left** Elevation.  
Digital drawing,  
500mm × 1170mm.



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Three Conditions on the coast of Scotland: Coast (above), Field (left). Photocopy manipulated hand drawn textures with digital collage, 300mm X 200mm.

**Student: Commended**  
**Nicole Ng**  
Architectural Association

Nicole Ng's abstraction of the Scottish landscape caught the judges' imagination with its stylistic rigour. It 'proposes an act of terraformation for an evenly distributed resource and settlement pattern for the Scottish coast' – a benign statement that belies the geological consequences of such an approach. And her drawn language evinces that one degree of separation from reality – mostly the result of multiple photocopies, digitally collaged. 'Coast' evokes a world modified by winds, tide and human action, 'Quarry' employs scalelessness to inform her proposition for housing, and 'Field' a photocopy bitmap, modern-day 'enclosure act' landscape, for zero-hour contract workers.

Not all bought into Ng's Cartesian world of representation, but Benedict Langlands & Nikki Bell thought the work a worthy commendation. Shasore won over the initial naysayers, convinced that in its image-making and narrative skill, 'it's refreshing and joyous'.

A well-rendered sense of fun... that exhibits an 'almost child-like understanding of memory'

**Student: Commended**  
**Areesha Khalid**  
University of Westminster

Immigrating to the UK as a young girl, the nostalgia associated with Areesha Khalid's childhood home is channelled here through a fictional magazine cover, 'Diaspora Digest' that dreamily re-presents past recollections. Both Arinjoy Sen and Neal Shasore responded instinctively to its cultural candour while contentiously adopting an almost Herge-like language. Sen agreed with Shasore's view of this image as 'more experimental, communicating both mood and atmosphere', while Jiřičná enjoyed its well-rendered sense of fun, saying it exhibited an 'almost child-like understanding of memory'.

That sense of naïve exposition was carried through in Khalid's supplementary Lloyd's of London image, making overt theatre of the organisation's hidden narratives and agendas; her intervention allowing for its 'virtual reality trading performances'. But it was Khalid's 'hold the front page' past reflections, shown here, that earned her the commendation. ●



**Right** Diaspora Digest. Digital drawing, 1150mm X 920mm.



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## Deep generalism is architects' USP

Architects' value is their combination of deep generalist and broad specialist knowledge, says Alan Jones

We are witnessing an accelerating shift in emphasis from what architecture is to what architecture does. Society and government are realising that it is about not just appearance, but a manifestation of balancing large-scale issues with fine detail delivery. This is changing how architecture is created, what it allows to happen, its impact and how it performs. Architecture and what architects achieve through how they work with others is being recognised as integral to the success and wellbeing of society.

With the optimum, most valuable intervention and solution not necessarily being a building, the RIBA is championing architects and the value that they create.

Our value starts with seven years of education and professional experience to registration. Our ongoing professional development, mandatory competencies, practice and being the subject of a government regulator (in the UK) give architects a strategic, theoretical, ethical, technical, and professional overview. That is why it takes so much to become and be an architect, and why we need to realise our value to society and for ourselves.

The deep generalist education of architects makes them a natural fit to be the 'guardians of the built environment'. Many collaborators and professionals involved within the built environment have specialist blocks of focused knowledge and associated expertise, and others have generalist knowledge. Architects connect multiple fields of knowledge and cross-disciplinary thinking; they are the modern-day polymaths of the built environment, whose knowledge is deeper than that of generalists and broader than that of specialists.

Instead of continuing to encourage greater levels of specialism, the government, society, academia and the industry must realise why they also need deep generalists who draw on a complex body of knowledge to help solve problems, balancing risk, opportunity and interdependency across a substantial number of issues. Without the deep generalist, from start to finish, solutions cannot be truly and effectively identified and developed, with gaps in the consideration of risk, opportunity and interdependency occurring, manifesting in the result, as anything from a sub-optimal solution to a

Piper Alpha or Grenfell Tower type disaster.

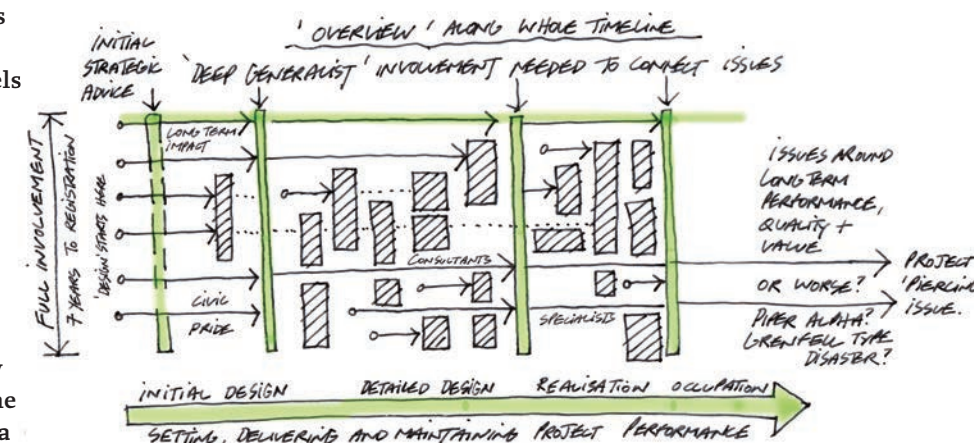
This is more than a golden thread of responsibility or a simple ability to hold to account. Government must understand that a fractured and lazy 'single point of contact is easiest for us' procurement process, with your best team members on the bench, needs to stop. A more integrated process, with deep generalists from start to finish, is needed to realise the optimum, most valuable, safe, uplifting outcome for everyone. Government needs to lead, accepting that shoestring fees, unreasonable time schedules and low budgets keep the industry in perpetual decline.

My two years as president started with our trustees taking the high road, followed by more mandatory competencies, a CPD recording platform, RIBA Academy, an enhanced technical-professional curriculum for future architects and The Way Ahead. We have created the strategic tram tracks of the President's Fact-Finding Mission for council, board and incoming presidents to follow and inform the masterplan towards our 200th anniversary in 2034.

We have started and more is to be done. As I handover the presidential baton to Simon Allford, the RIBA must put out our best team as we aim to realise greater funding of the education of future architects, show why the right person must be in each function of the design and realisation process, respond to new legislation, and address procurement. We must take these opportunities. I will not wish us luck, as preparation, research and advocacy will prevail. ●

president@riba.org @AlanJonesPRIBA

**Below** Opportunity, risk and interdependency – the Swiss Cheese Diagram. Sketch by Alan Jones 2021



PORTRAIT STEPHANIE WUNDERLICH



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## Obituary

79

A 'special genius in the design of houses' who was one half of de Blacam and Meagher Architects, a practice pre-eminent in bringing Irish architecture to the international stage



## John Meagher 1947 – 2021

John Meagher, who has died aged 73, was a founding partner of de Blacam and Meagher Architects, a pre-eminent practice among those that brought Irish architecture to international attention in recent decades.

The son of a top civil servant, John graduated from the Dublin Institute of Technology before winning a scholarship to study in Helsinki, where he came under the life-long influence of the great Nordic architects of the 20th century – Aalto, Lewerentz, and Asplund. He then travelled to Philadelphia where he worked at Venturi Scott Brown, remarkably unaware that his future partner, Shane de Blacam, was a few blocks away in the office of Louis Kahn.

Following the 1976 opening of their Dawson Street office, John and Shane combined practice and teaching, and were inspirational tutors at University College Dublin to a generation that includes some of Ireland's leading architects. Their first commissions were mostly domestic; three announced de Blacam & Meagher as a force to be reckoned with – John's terrace of six Ballsbridge mews houses, his double win in the Dublin diocese's competition for new churches in the city's expanding suburbs, and the firm's second-placed entry to the 1979 competition for a Taoiseach's residence in Phoenix Park.

De Blacam and Meagher's prolific output over 45 years encompassed education, conservation, commercial, and cultural architecture, but I believe John's particular contribution to the practice's residential and church architecture is what he would most wish to be his legacy. At his funeral, Shane's eulogy referred to John's 'special genius in the design of houses', and it is evident in everything from his first mews houses to the more recent Ibiza villas. He had a reputation as the 'go-to' architect of high-end houses for the rich and famous, but his mastery of

residential form and space could equally be applied to more modest commissions. The Herbert Lane and Harold's Cross terraces are classic exemplars of the low-rise, high-density genre that Ireland needs so much in today's housing crisis.

He also had a thorough understanding of the fundamentals of ecclesiastical architecture. A treasured memory of visits to John's second home on Ibiza was being taken to inspect his favourites among the island's whitewashed churches, bell-towers and porticos. There wasn't one he did not know, or a plan he couldn't draw from memory. This is not surprising; his 1977 Firhouse church continues to be the subject of architecture school dissertations, and his 1989 Knock chapel of reconciliation is one of the iconic buildings of late-20th-century Ireland.

Arguably the most talented among the many illustrious architects that it has been my good fortune to work with, John had a brilliant ability to understand immediately what was at issue in trying to sort an idea or a plan. An exceptionally gifted draftsman, he could start an A1 drawing at the top left-hand corner and work his way across the page to the bottom right-hand corner, at which point a fully-realised design would emerge, for anything from a construction detail to the plan of an entire project.

John was hugely public-spirited and made numerous pro bono contributions to architectural causes. He was also the most sociable and convivial of persons, and a generous and entertaining host. To quote from Seamus Heaney's tribute to their mutual friend Robin Walker, John was 'no slouch... whether to lash into it, or just to lash it out'.

Survived by his mother, Theresa, and his sister Anne, John was predeceased by his father Gerry and his brother Barry. ●

Paul Keogh is founding director of Paul Keogh Architects

## IN MEMORIAM

**Keith Leon Hilton**  
ELECTED 1967, YORK

**Neville William Gordon Wilson**  
ELECTED 1972, NORTHWICH

**Alan Dean Ward**  
ELECTED 1978, TWICKENHAM

**Paul William Roberts**  
ELECTED 2002, LONDON

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## Exchange

### Robust case for brick

'Climate action: We can put a block on brick' (RIBA July p59) highlights the ongoing problem of considering sustainability in isolation.

In the context of housebuilding, few materials are as well suited as masonry to meeting the UK's new homes target as quickly or with the same, long-term suitability. How better to provide quality homes for future generations than with building products possessing a minimum design life of 150 years?

As for sustainability, the masonry sector is en route to becoming carbon negative by 2050. In part, this is being achieved through a small, local supply chain and the block's ability to reabsorb atmospheric CO<sub>2</sub>.

It's also climate change adaptable, reducing the risk of overheating and protecting against flood and storm damage. That's even before touching on a block's high thermal performance and energy efficiency.

While other materials may appear more eco-friendly, a carbon footprint must consider all aspects of the life cycle. For example, a comprehensive NHBC study of structural materials, cradle to gate, concluded a timber frame house has only 3% lower embodied carbon than a masonry-built house.

Material sustainability is not always immediately obvious. Let's not mistake traditional for outdated. Masonry is here to stay, quite literally.

**Chris Stanley, housing manager, Modern Masonry**

### Broadgate's partial green calculations

Surely something is missing from the embodied carbon (and eco-calculations) for the Rebuilding of Broadgate (RIBA June p32)? What of the embodied energy contained in the parts demolished? And then there's the energy needed for demolition, for recycling and for disposal. Through the expenditure of energy most of the steel frame was no doubt recycled, but the tons of indestructible granite presumably went to land fill.

Can replacing much of a massive building not yet 40 years old really be applauded as exemplary green practice?

**Russell Taylor, Russell Taylor Architects, London / Cornwall**



### Clarity calls for clear plans ...

The RIBA Journal is much improved and now, I think, one of the better architectural magazines. The choice of buildings reviewed is excellent but I still have problems with being able to understand some of the plans that have been included. The July issue (p18) has a crematorium at Guildford which needs careful study to understand the circulation necessary for the different groups of mourners. The site plan and layout plan were far too small (I had to use a magnifying glass) and not orientated the same way which made appreciation of the building very difficult.

The Journal must not just be another magazine with nice photos to look at.

**Martin Hewitt**

### ... but we need sections too

Am I alone in wondering why architecture journals, including RIBA, present buildings in photographs and plans. Sections are rarely used. To fully understand the design of a building we need cross sections. After all, to paraphrase Alberti, order is found in the plan but beauty lies in the section. And in terms of today's agenda, sustainability cannot be understood without a good cross section.

**Brian Edwards, professor emeritus of architecture, ECA, Edinburgh University**

### Something to get off your chest?

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We welcome letters but retain the right to edit them

**Above** This shot by Dennis Gilbert caught the energy of AL\_A's Timber Wave installation and drew out its resonance with the V&A entrance behind it.

'He offered praise, support, understanding, and most of all, recorded beautifully the buildings and spaces of so many varied architects, with authenticity and truth.'  
Yvonne Farrell and Shelley McNamara, Grafton Architects, on photographer Dennis Gilbert who has died aged 70.  
[ribaj.com/dennis-gilbert](http://ribaj.com/dennis-gilbert)



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Scottish Widows Fund and Life Assurance Society  
Edinburgh, 1976

This headquarters for the Scottish Widows Fund and Life Assurance Society in Edinburgh was the second to be designed for the company by Sir Basil Spence, Glover & Ferguson in 15 years. The first, in 1962, was a simple block with a grid-like facade of windows and marble slabs built on a square plan.

This newer building was completed in 1976 and was a more complex design consisting of 12 interlocking hexagonal blocks of varying heights which recall the local geological structures of basalt rock. Clad in a continuous curtain wall of brown

solar glass with York stone boundary walls, its design emphasised harmony and scale with its site; special consideration was given to its aerial view as it could be viewed from the nearby Arthur's Seat and Salisbury Crag. The relationship with the exterior continued inside the offices, with planting echoing the gardens designed by landscape architect Sylvia Crowe.

The building is captured here by Henk Snoek who exploits the reflective qualities of the glass walls and the contrasting texture of the stone wall. ● Justine Sambrook

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Head of sponsorship and sales  
**Richard Tomlin**  
+44 (0) 20 7496 8329

Account manager, Midlands and North  
**Sunil Shah**  
+44 (0) 7501 466 660

Account manager, London and South  
**John Ward**  
+44 (0) 7741 265 696

Advertising and digital support  
**Charlotte Collins**  
+44 (0) 20 7496 8326

RIBA Publishing marketing  
**Charmian Beedie**

Publishing director  
**Helen Castle**

Telephone  
**+44 (0) 20 7496 8300**  
Fax  
**+44 (0) 207 374 8500**  
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