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The sums being spent to realise the M+ project leave no doubt that it is a totem to define China’s new cultural role. Time will tell if it will be read as an empty gesture in the face of ongoing regulation of artistic and political freedoms, for if anything, M+ pulls these issues into sharper focus. But it also reminds us of a cynical view, increasingly governed by the group think of social media, of how art’s individual expression can still be a powerful means of protest. Whether M+ becomes a worthy vessel for such potential is ultimately up to Xi Jinping. — Jan-Carlos Kuchawienk

M+ MUSEUM, HONG-KONG
HERZOG & DE MEURON
Read the full story: ribaj.com in plus

Inaugurated last November, Swiss architect Herzog & de Meuron’s M+ Museum in Hong Kong is Asia’s first global museum of contemporary visual culture and aims to put the territory on the cultural map. Eight years since the firm’s competition win, it was built with local architect TFP Farrells and engineer Arup – its inverted ‘T’ section acting as an anchor for the new West Kowloon Cultural District. This Foster + Partners masterplan on reclaimed land includes a 23ha public park which will connect to Kowloon via an avenue of cultural facilities, of which only the Iqua Centre at the east end exists.

Contained on a plinth of striking horizontality in counterpoint to the city around it, M’s 65,000m² has 17,000m² of dedicated exhibition spaces spread over flexible gallery spaces, with an open ground level allowing access from all four sides. The new M+ isn’t just an art gallery; it houses three cinemas, a mediatheque, learning hub, research centre, shop, bars and restaurants, and

1: Buildings

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Clancy Moore has finished work on its repurposed barn at Shatwell Farm, leaving plenty of scope for ad-hoc additions by those who use it.

Words: Chris Foges  Photographs: Sue Barr

Most visitors to Clancy Moore’s new building in a barn at Shatwell Farm ask if it is finished. The answer is yes, and no. The architect’s work is done, leaving a rough-hewn ensemble of spaces, structure and services to be adapted by participants in various educational and cultural activities that take place in the Somerset farmyard. ‘The intention was to make something finished enough to be enabling,’ says practice partner Andrew Clancy, ‘but not so finished as to shut down potential’.

The farm defies easy classification, but is used by writer and collector Niall Hobhouse as a sort of test-bed for speculation on architecture and rural development. Alongside a dairy herd in a colonnaded cowshed by Stephen Taylor there are new and old buildings housing carpenters, stoneworkers and a gallery, and monuments by Peter Smithson and Alvaro Siza. Also present is Drawing Matter, a drawings collection with attached events including a summer school for teenagers. Other goings-on among the silos and silage pits include dinners, public talks and opera.

Clancy Moore’s project is conceived as a piece of infrastructure which should be capable of supporting all these, from the largest to the smallest, alongside a store for Drawing Matter.

Seeking to make a building that has a strong character but remains open to interpretation, the practice referred to Florian Beigel’s Half Moon Theatre in London and Lina Bo Bardi’s Teatro Oficina in São Paulo – robust spaces for performance that resemble urban streets, set within existing buildings. Other aims were to celebrate the elegant portal frame of the barn itself – a 1970s Atcost prefab – and to do only as much as necessary, with as little construction as possible.

Internal partitions were cleared to expose the line of precast columns down the middle. On one side, the building is left vacant to accommodate large audiences. On the other, the ground-floor store and a multi-use space above are set behind a two-storey spine of toilets, kitchens and stairs, constructed from concrete blocks. Punctuated by deep openings and subtly refined by varied colours and bonds in the blockwork, it presents a semi-formal facade to the empty side. Fixed to it is a galvanized steel structure that forms an arcade leading from the entrance to the back of the building, where there is a rudimentary outdoor kitchen with an open fireplace. With a balcony above served by stairs at both ends, it’s full of theatrical possibilities. The large space upstairs might serve as a dressing room, classroom or gallery. Its open

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The RIBA Journal January 2022

The sides are hung with translucent plastic drapes usually found in mechanics’ workshops, which billow in the breeze. One can imagine summer school students having a great time camping up there, with a wide-angle view of the valley below. When I visited, traces of their involvement with the building were all around: straw bales were stacked to make an amphitheatre on the upper floor, and a screen of woven hazel hung from the steelwork, casting long shadows down the arcade.

As an environment for temporary events, whose inhabitants can create the spaces they want, the project picks up on the enduring influence of the late Cedric Price at Shatwell. His sketches of the farmyard – as adaptable sheds and stores – were the last he made, and still inform Hobhouse’s view of it as a perpetual work in progress. ‘The first rule is that there is no intention that it should ever be finished, and no masterplan’, he says.

Materially, too, the building is of its place. Industrial products that constitute the modern agricultural vernacular are supplemented by items salvaged from the yard. Precision and canny improvisation in their use make characterful spaces. Railway sleepers and glass panes found in the barn make walls below a new corrugated metal skin; and chunky columns within the archive are formed from stacked sections of drainage pipe. ‘There was a genuine engagement with ideas of bricolage and the ad-hoc, in the proper sense of being specific to this condition’, says architect Colm Moore. ‘Things that architects often talk about, but I’m not sure they actually do.’

There’s a lot packed into this lean and economical structure, but much went unrealised because it crossed the line of ‘just enough’. What happens next is for others to decide.

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Back on form

Benevolence stretching back to the 15th century lies behind 6a’s rebuilding of a community gym in a quiet London alley

Words: Isabelle Priest  Photographs: 6a architects

This history of Holborn is intrinsically tied up with a merchant tailor called Sir William Harpur. Born to humble beginnings around 1496 in Bedford, he made his fortune and became Lord Mayor of London in 1561. In 1566 Sir William and his wife Dame Alice created an endowment comprising a schoolhouse (now the Old Town Hall) and other property in Bedford, and more than 13 acres of farm land and water meadow he had bought just outside the City of London, in what is now Holborn. The endowment was used to support the dowries of ‘poor maidens’ and education in Bedford, including Bedford School and other subsequent boys’ and girls’ schools. The endowment’s value greatly increased when the London estate was developed for housing in the late 17th century, with the profits able to maintain the success of the school and keep fees low.

In 1920, the headmaster of Bedford School decided it would be fitting to give something back to the inner city and established the Bedford House Holborn Boys Club, an increasingly common initiative around London at the time. It was set up to provide working class children with the same facilities and activities of public schools; fencing, drama, chess, gymnastics, trips abroad and its own magazine.

By the time 6a architects came to the project this association with Bedford School had long been lost. Its original building was bombed during the Second World War and ambitiously rebuilt in 1957 as part of a terrace on Lamb’s Conduit Street called Raker House, with shops on the ground floor, offices and a caretaker’s office. In the 1980s the Trust had sold it into private ownership, and all that was left was one of the two original community centre floors and a vertiginous staircase down to a dark and leaky basement
gym – run by the Holborn Community Association which was set up at the time of the sale to save the whole building from demolition.

Nine years ago, the organisation received some funding and decided to commission a local parent, 6a’s Stephanie MacDonald, to do a feasibility study into the option of buying the building next door. Although the HCA was gazumped by the landlord, it swapped the third floor community centre for a 60-year lease on the gym site, along with permission to rebuild it. After coming here for years of soft play and activities with her son, it was only on a site visit for the feasibility that MacDonald unearthed the archive that revealed how the organisation and building came to be. The organisation, however, was struggling with funding, accessibility and maintenance. ‘At the time the 1957 building was constructed, it was considered the council would fund social services like this,’ she explains. The gym was top-lit by an unreliable glass block roof and was accessed by a labyrinthine series of spaces from Emerald Street, a shadowy pedestrian alleyway.

A new brief was to give the building a sense of place for children in the neighbourhood and make it visible, suitable for hire, easier to run, accessible and welcoming. 6a’s approach has essentially been to rebuild as much as possible, while retaining the 1960s concrete structure – basement floor slabs, ground floor concrete structure, posts and lateral brick walls, to mitigate additional embodied carbon from complete demolition. The gym still occupies its original footprint to the rear of Raker House, but the front single-storey contemporary red brick entrance on Emerald Street has been demolished to make way for a new, two-storey glass facade that squeezes in a reception, changing rooms and buggy parking as well as additional staff and community rooms that can be let out to generate income.

IN NUMBERS
398m² GIA
£1.93m construction cost
£4850 cost per m²

As building access to the site was very restricted, new elements had to be lightweight and in manageable parts for assembly on site. Consequently, the new structures are made from steel trusses with blockwork and timber walls; everything is left exposed, from concrete floor slabs to timber joists and electrical cabling run in galvanized conduits. The gym glass block roof has been replaced by three glazed lanterns that admit better daylight. Transparency is a key theme throughout. The glass facade means passers-by can see in, but an automatic sliding door encourages people to slip inside almost without noticing. Once in the building, the ground floor reception opens before you with more sliding glass doors and a Juliet balcony beyond, that overlook the refurbished gym below. This means a single member of staff can man the entrance and other community functions, as well as keep an extra eye on those activitors too, which helps with funding pressures.

As a bright green grille adds a pop of colour to a palette of whites, greys, nudes and other greens advised on by Little Greene.

A metal stair, again in green, to the front left of the building gives access to the basement where there are changing rooms, a kitchen, storage and double doors to the gym itself. This has been entirely refurbished, with air quality monitors that show when to operate a mechanical heating and cooling system. The acoustic floor is supplied by Junckers, and additional sound insulation comes from a woven linen/cotton mix fabric enveloping the upper half of the gym walls – printed with a version of the artwork by Caragh Thuring that is etched on the glass – ‘a palette of whites, greys, nudes and other greens advised on by Little Greene.

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Change of quay

Four local women turned to Invisible Studio’s Piers Taylor to realise community growth over commercial gain with East Quay, a seaside extravaganza in Somerset that just keeps on growing.

Words: Eleanor Young
Photographs: Jim Stephenson

Watchet is small town, sandwiched between the Quantock Hills and the muddy, dramatically tidal North Somerset coast. It has two Co-ops, a Spar and six pubs. There are take-aways and gift shops for tourists in search of bracing sea air, fossils and angling.

And now it is has the extraordinary East Quay Watchet. Its salmon pink cliff of concrete rises to embrace the town’s esplanade, a candy-stripe Punch and Judy puppet theatre and five improbable beach hut accommodation pods popping out on top (two on stilts). The form is extraordinary enough, but most extraordinary of all is the warmth of life emanating from East Quay. Café, gallery, workshops, an all-singing all-dancing education room, new streets and courts... on a blustery grey day this place seems to contain a whole world of activity and possibility. It would be correct to call East Quay Watchet a community building but that is a massive simplification. Perhaps we could settle for a community enterprise building with art gallery and eyries for rent, Airbnb-style.

The client is the Onions, more formally, the Onion Collective, originally four Watchet women, moaning in the local over a cider, says one of them, Georgia Grant. They asked themselves what could be done for their Watchet community, starting with a series of conversations with their town neighbours about what the town needed for a stronger future. The Onions (named for the adding of layers and flavour) came up with a plan for this spot and then secured the site and the money for the £7.3 million building, and are now running it calculating social impact as carefully as the finances. They have brought through the ethical offer in the shop and figured out how to use the Kickstarter scheme to help Watchet youngsters grow in confidence through working at East Quay, embed tenants, and fill in for everyone else, waiting at tables if needed.

What started it off, other than the cider, was the development site at the end of the Esplanade, alongside the harbour and marina. Urban Splash had the option on it, there was a competition won by Riches Hawley Mikhail and plans for 83 flats, information centre and restaurant before planning and re-evaluation intervened. When the council decided to do something different with the site in 2014 the Onion Collective was ready to step in, already having secured a grant for consultation and a feasibility study. The idea was for a joyful, playful cultural space more embedded in the needs of the town. They
started looking around for architects, start-
ing with googleing young, interesting practic-
es and inviting them to come and visit. Piers
Taylor’s Invisible Studio stood out for its en-
ergy and materiality and because the Onions
needed an advocate and champion who could
convince the council. Invisible Studio is hap-
pily based in Somerset too, though over two
hours away. But it wasn’t a simple brief and
design. It emerged and morphed with a series
of sketch schemes as ideas were taken to the
wider community at regular intervals.

It is worth another quick diversion here.
Those answers about the future of a strong
Watchet became urgent as the town’s pa-
paper mill and main employer closed in 2015,
and with the loss of some of the promises of
the Urban Splash scheme. Tourists – many
of them arriving on the steam train from
Minehead or Bishops Lydeard – needed to be
captured, so a fast track £340,000 project was
launched – with both the Onion Collective
and Taylor and architect Louise Crossman –
to do up Watchet Visitor Centre and Boat
Museum in its Brunel shed, and extended to
create an information centre that doubles as
a town council chamber.

Back at East Quay two fundamental ideas
were emerging: it needed to be able to devel-
op as funds were secured and it should be part
of the town. The final form put the invest-
ment in the grainy solidity of the concrete
plinth and allowed the other timber-framed
elements to grow out of it at a slower rate.
The brio of the formal gesture has echoes of FAT’s
houses lightly and laughingly perched atop a
block of flats in Middlesbrough. But for Tay-
lor the move is more akin to the timber ex-
crescences on warehouses, or the jettied-out
house that he points to in a hidden corner of
the town. And the scale of the upper floor
pods ties East Quay to the town’s assemblage
of buildings from which this scheme emerg-
ex. There are little twists in the volumes,
with windows cut in – avoiding demanding
too much from the view, creating protection,
not simply exposing them to the sea. For
hundreds of years this has been how we have
needed to build so it feels a more natural form.

The idea was for a joyful,
cultural space embedded in
the needs of the town
than the glazed expanses of Grand Designs homes. And, endearingly, this composition of lookouts has just a hint of alert merriquets.

The V plan of East Quay engenders a sense of protection and town-ness along the first floor ‘street’. Entering through the narrow alleyway from the coast path along-side the steam railway, you are stopped by the candy stripes and enticed through the volumes of the building into this street and the big view of Bridgewater Bay. Past that are more intimate views, with sunny, south facing makers studios showing off work. With stairs linking to the town at either end I imagine school groups racing up from the Es-planade to the Creator Space education room, gallery-goers proceeding to the harbour, or holiday visitors meandering from the stairs back to their pods. On an off-season Tuesday, with construction work continuing on the upper levels, there is still plenty to look at leaning over the railings, visitors, print and paper makers from the studios downstairs, and two incongruous bright blue shipping containers in the courtyard.

The containers are emblematic of this building. They were the pioneer settlement before the construction got going, with artists using them as studios and gathering to eat and talk. The container in the broken concrete slab courtyard, using them as studios and gathering to eat and talk. When the Onions survived the desire for the new building and staying, the containers sitting in a landscape studded with remnants of the rough concrete in crazy paving form, softened by gravel and plants. It is a bit farmyard, bit back garden. It is a bit farmyard, bit back garden. It is a bit farmyard, bit back garden.

The café spilling into the courtyard.

The Creator Space demands a different sort of physical engagement with its platforms and fabric covered balls. Or you can sit on inflated fabric coloured balls that you take down from the walls. Or you can sit on inflated fabric coloured balls that you take down from the walls. Or you can sit on inflated fabric coloured balls that you take down from the walls. Or you can sit on inflated fabric coloured balls that you take down from the walls.

As a result of this sort of thinking, by the Onions and Taylor, that means that the incongruities that crept in from Stage 4 as the design was taken on by Warrington-based Ellis-Williams, are more easily overlooked. It means that the detailing is neither here nor there (though doors and ironmongery are harder to ignore).

For Taylor, who has long been designing smaller education buildings alongside an eclectic mix of houses and inventive rural structures (oh, and that TV career) it is a great disappointment that he didn’t get to see this major project through construction. The Onions felt they needed someone who had done galleries, a practice that could do work worth £150,000 at risk while grants were secured – a larger practice. Taylor’s relationship with the Onions survived though – they now teach for his studio on design and making at Reading University giving a perspective on community building. And what is missing in detail design in much of the building is being brought to life in a spectacular fun way by PEARCE+Fægen, a group of two young ar-chitects and an artist who moved down to Watchet to do the interiors. They teamed up with an educational physiologist to invent the Creator Space, which lined in ply with a landscape of stacked platforms working as climbing-frame, hiding place, storage and seating. Or you can sit on inflated fabric coloured balls that you take down from the walls. Or you can sit on inflated fabric coloured balls that you take down from the walls.

£7.1m total project cost
£5.68m construction cost
1040m² is £5625m² GIFA cost per m²

£5.58m construction cost

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PEARCE+Fægen also took on the interiors of four beach hut pods. The group has insert-ed mezzanines and a hanging stair, a lounge space in a suspended net, it uses colour to create a sunset bathroom and made an etched illustration to draw out the story of Watchet and over high walls. These are not holiday homes so much as sherbet explosions of experience. Just like this building is much more than a gallery, studio space or café. Looking at this place you feel Margate missed out when it got Warrington-based Ellis-Williams, are more easily overlooked. It means that the detailing is neither here nor there (though doors and ironmongery are harder to ignore).
Every city rests on the buried infrastructure of modern life – cables, metros, pipes and drains. Beneath the city of Bath there are also hot springs – the foundation of the city since the Romans arrived and built the warm Roman Baths which can still be visited today. In Georgian times the waters became a health and social draw. The now famous Georgian crescents were joined by assembly rooms, and investment in the spa infrastructure included a boilerhouse – to heat the natural spring water further from its standard 45 degrees – and a laundry. As the boilerhouse soot from the Somerset coalfield started to blacken the local limestone, so those who had lived out their hedonistic last in this social city were commemorated in Bath Abbey, just steps away. All 7000 of them, here is a rollcall of the society and the colonial exploitation and Atlantic slave trade that funded the development of Georgian Bath.

Step forward to the 20th century and to Bath-founded, Stirling Prize-winning practice Feilden Clegg Bradley Studios. Over just a few years it won two projects to breathe new life into the Roman Baths and the Abbey. Both were large projects (worth £5 million and £10 million), minutes apart and largely invisible, much in the vaults under the city and serving the masterpieces of heritage that keep Bath’s tourist trade flourishing. The Baths and Abbey are also, rather wonderfully, connected by the thermal waters: FCBS’ Abbey Footprint project captures the heat from the millions of litres of water that bubble up each week – and were previously piped away through the Roman Great Drain to swirl in the cold waters of the River Avon – using heat exchangers to gently warm the Abbey floor.
**Critique**

**Bath Abbey and Archway projects**

**Roman Baths Archway Project**

But let’s start with the boilerhouse and laundry – now a new education centre, the Archway Project. I have experienced the Roman Baths, tagging along on a school trip, uncomfortable in a complex queue in a frenetic Georgian entrance hall, trying on togas and building mosaics with 30 children in a room smaller than the average classroom. The new entrance and learning centre will relieve a lot of pressure on the Roman Baths, and on the teachers and children who visit. It will also give a chance for longer running projects for those with mental health issues or disability, or for family engagement. It is connected to a new heritage centre for the whole city, with the same local authority client, Bath and North East Somerset Council.

More than that, the Archway Project will become part of the experience for them, made exciting by moves by the architect, unique access to archaeological remains, and a tunneled route leading directly to the Roman Baths. Scrape and reveal techniques draw attention to the mix of buildings (boilerhouse, laundry with chapel, and stables), with old surfaces and remnants of large scale pipe work and new steel balustrades left naked. It is an architecture of texture and solidity with delicate interventions in the central circulation; this opens up to a double height space before squeezing students down the narrowest of stairs and passageways to reach a vault littered with Roman-worked stone, gradually unveiled by a dynamic lighting scheme.

On the upper floors a lighter set of rooms reveal themselves, full of timber and unexpected delights. Cut into the exposed roof structure, a huge rooflight opens up views of the ornate boilerhouse chimney that is almost invisible from the surrounding streets. Deep window seats are cut into a wall, offering up glimpses of greenery and the Abbey between the buildings.

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**Archway Project in Numbers**

- £5m total contract cost
- £3984 GIFA cost per m²
- 1255m² GIA

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**ARCHWAY PROJECT Credits**

- **Architect** Feilden Clegg Bradley Studios
- **Client** Bath and North East Somerset Council
- **Structural and civil engineer** Integral Engineering Design
- **Archaeology** Cotswold Archaeology
- **Main contractor** Beard Construction
- **CDM advisor** Chase Consulting
- **Exhibition designer** Houghton Kneale Design
- **Lighting designer** Lux Lucis Ltd
- **Building services engineer** Method Consulting
- **Fire engineer** The Fire Surgery
- **QS** Edmond Shipway
Critique
Bath Abbey and Archway projects

Project architect Matt Somerville worked out the angle of the view on the model and is still delighted at what it captures in real life. Another room is built up in giant steps around the cast iron columns of an old chapel, playing on its curves with a circular rooflight, a ring of lighting and a generous curving ramp running round one side of the room. These moves deal with problems like complex existing fabric, level changes and bringing in daylight, but are done with the gift of generosity and confidence. Equally, acoustic requirements by Building Bulletin 93 for the two education spaces have been dealt with using a combined solution of timber-framed secondary glazing and wall linings and decoration that includes vents, acoustic absorption and storage. Vitrines create dividers and pose as windows, enlivening walls. These are spaces of character and joy born out of complexity and calculation.

Scrape and reveal techniques draw attention to the mix of buildings

The Abbey had many of the same challenges and a good few extra besides. The Footprint Project started with the Abbey’s collapsing floor, a repair job. And loos – during the busiest times worshippers had to head to the local All Bar One to relieve themselves.

The 1620s Abbey – now Bath’s parish church – sits on the foundations of a larger Norman cathedral. In the floor were thousands of burials until was declared full in 1840; they are commemorated with 891 memorial or ledger stones there, or on the walls. In the 1860s, when George Gilbert Scott came along with a Victorian restoration, the stones were lifted to install heating vents and many of the skeletons underneath crushed before pews were installed throughout the nave. By 2010 the floor had become uneven, the stones subsiding over its rotten skeleton foundations and suffering in the damp trapped between the underlayer and the platforms on which the pews sat. Cracks had appeared in many memorials.

The Abbey wanted not just repair but to make itself fit as a modern day place of worship and Christian engagement, and a part of civic society as the largest covered space in the city centre. As well as making the Abbey itself more accessible and flexible, the Footprint Project expanded to include dealing with the back of house. The offices were a warren of tiny rooms in the neighbouring Georgian terrace, the shop in the 1920s extension was overcrowded and the choir had to rehearse in a tight space alongside it. Now the terraces have been reworked and the circulation improved: the narrow staircase has been widened, and the complex of offices that it leads to has been opened up by driving a hole linking an enfilade of workspaces. It is all very practical and slightly worthy.

But then, you open another small door and suddenly the floor falls away to reveal space below and above you. This volume of scooped-out terraced house has been turned into an oak-panelled choir room with a...
The vaults give the Abbey itself has something of the same problem. It is invisible somewhat, but it will no doubt be remedied when in use. The sense of having missed the point of the architecture the vaults and Abbey. Passing through this leaves a discovery centre awaiting fitout on the ramp between as circulation for both air and visitors – as does the work for events and education, though it has to double invaluable as visitor numbers pick up. The space will memorials of the Abbey floor. The new loos are already Pennant sandstone floor in varying scales echo the door frames paying the same homage. Flags of a tough the arches of the vaults with timber insertions around buttresses. A supporting concrete structure mirrors Abbey vaults the space opens up, interspersed with under the pavement. As the terrace vaults run into the street to the Abbey, they now have a top-lit corridor umbrellas over their robes to progress through the terrace. And rather than the choir donning coats and practice. shelves and cupboards of music. In here 60 singers can narrow balcony around the edge. There’s a grand piano, moveable stalls – designed by FCBS – music stands, shelves and cupboards of music. In here 60 singers can practice. The choir school opens into the basement of the Abbey and Archway Critique

If you are looking for new architecture, the Abbey has 3000 stones, many with memorials on them. Below The Abbey floor has 3000 stones, many with memorials on them.

Abbey ground floor plan

Abbey Footprint Project credits

- Client: Bath Abbey
- Architect: Feilden Clegg Bradley Studios
- Structural engineer: Mowat Williams
- Lighting design: Michael Williams Studio
- M&E: Wates
- Archaeology: Wessex Archaeology
- Conservation: SSH
- Conservation project manager: Dance
- Main contractor: Synergy
- Electrical contractor: Emery Builders
- Metalwork: Bradley Studios
- Lighting control: HUFTON + CROW (2)

**In Numbers**

- **总价格** £10.05m
- **总建筑面积**
  - 调查层 1710m²
  - 教堂 1621m²
  - 船舱 3331m²
- **总面积** 3017 cost per m²

- **总空间**
  - Educational and hospitality
  - Shop
  - Terrace
  - Exhibition and meeting rooms

- **总时间**
  - 333 days of the Church ‘court’ proceedings held in public – and making the project documentation open to all.

- **总费用**
  - £10.05m

- **总建筑面积**
  - Terrace offices and choir school

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The benefits of collaboration on display at Westmark Tower

AluK helped save months from the build schedule of a 29-storey, curved-in-plan tower by working closely with the architect, developer and other consultants throughout.

The 110m, 29-storey curved-on-plan Westmark Tower is the tallest residential tower completed in central London during 2021. Part of Berkeley Homes Central London’s prestigious West End Gate development in Marylebone, it features more than 14,000m² of unitised curtain wall, designed and supplied by aluminium fenestration specialists AluK and installed by envelope contractor Martifer.

What makes this project really stand out is the collaborative approach that was demonstrated by AluK and the other consultants involved from the outset. With Berkeley at the centre of the process, the technical and commercial elements of the facade were successfully de-risked at pre-tender stage because AluK was able to work directly with lead architect Squire & Partners, delivery architect Design Delivery Associates and structural engineer WSP – on a RIBA’s system design for the unitised envelope.

Jon Sheaf, AluK’s national major projects manager, explained: “AluK’s specialist expertise meant that we could create a unitised facade for the post-tensioned concrete frame which suited the design intent, while addressing the technical issues of a curved-on-plan facade from the second to 29th floor. All the unitised cells needed to be dead-loaded back to a post tensioned concrete frame with three dimensional floor bracket, while catering for the varying facia of the facade.

‘Tim Geddes, partner at Squire & Partners, commented: ‘Design challenges were overcome quickly and thoroughly with the AluK Team. Optimum possibilities were understood and confidently communicated, generating a safe, efficient and elegant design solution.’

The final unitised solution features more than 14,000m² of unitised curtain wall, designed and supplied by AluK.

Right What made the project really stand out was the collaborative approach adopted by AluK and the other consultants.

Far right There are more than 2200 unitised cells in the tower, with a vision cell, panel cell and a recessed balcony cell for each floor.

Above Westmark Tower features more than 14,000m² of unitised curtain wall, designed and supplied by AluK.

Right What made the project really stand out was the collaborative approach adopted by AluK and the other consultants.

Far right There are more than 2200 unitised cells in the tower, with a vision cell, panel cell and a recessed balcony cell for each floor.

The facade design meets the thermal efficiency requirements of the building at 0.95W/m²K, as a weighted average. Using a 454B RwCtr acoustic glass, it also meets sound reduction targets.

More info at: https://uk.aluk.com/en-gb/home/specifier or detail: (QR code)

The RIBA Journal January 2022
Discover the cladding that is kinder to the environment

Swisspearl fibre cement panels are used worldwide and are recognised for their high quality and unrivalled design and finishes. The products are not new to the UK market and have been in circulation since the 1990s, and since 2010 has been promoted through their distributor Swiss Facades.

A major goal of the manufacturers of Swisspearl is to reach total elimination of fossil fuels.

Today, the Niedernen site is fuelled directly from the main waste incineration plant in Switzerland.

Swisspearl work with government bodies to set these targets and are reviewed annually to keep on track; since 2013, CO₂ emissions have been reduced by 61% and energy efficiency has been increased by 21%.

CO₂ - reduction since 2013

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<th>Year</th>
<th>Actual Value</th>
<th>Target Value</th>
<th>CO₂ - emission</th>
<th>Target %</th>
<th>Actual %</th>
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<td>13000</td>
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<td>2020</td>
<td>5000</td>
<td>7000</td>
<td>-</td>
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</tr>
</tbody>
</table>

Some of the ways this was achieved include:

- Producing electricity using solar panels, which is fed into the factory’s internal power grid and reduces external power consumption
- Switching to electric powered vehicles for transporting materials around the factory
- 84% of raw material sourced locally from Switzerland

Holly Lewis

co-founder partner at We Made That, explains the route to becoming a B Corporation

Some of the ways this was achieved include:

- 90% raw material transported by rail to reduce emissions
- Factory lighting, motors and compressors are kept updated to ensure optimum efficiency
- Almost 100% excess waste-water from the factory is biologically purified and returned to public water by waste-water treatment organisations

B Corps are businesses that meet the highest standards of social and environmental responsibility, transparency and accountability. You provide information on every aspect of the business, with evidence, and have to score over 80 out of 250. The average applicant gets around 50; we got 85.3. Assessment was quite an endeavour; it took a lot of time and drills down deep, not just asking if you’re doing staff wellbeing surveys, but what proportion are satisfied.

We’ve always tried to be a good business, and say so, but that’s meaningless unless it’s externally verified. There are benefits beyond getting a warm glow inside. We now have a structured set of goals for improvement. It’s good for recruitment – candidates have raised it as a distinguishing feature. And clients are assured that they are working with the right people. As ESG (environmental, social and governance) issues rise up the agenda, it can be useful to demonstrate the values of their suppliers.

It prompted us to do things we might not have considered, such as reporting financial results quarterly to our office of around 20 people and giving written career advice. Our articles of association now commit to balancing profit and purpose. Making the changes was straightforward because we have autonomous control within the business – no board approval required. We need a policy to support breastfeeding mothers? Done.

No equivalent scheme considers the whole of what we do; the impact of our projects and how we run the practice. There’s a set of general questions and others that are specific to the ‘built environment stream’. We do a mix of research, masterplanning and buildings, so get fewer points for sustainability measures than others might. Yet good scores for our impact on low-income neighbourhoods don’t count in our stream. That was frustrating, but we were pleased with our result.

Many have told us they are starting the process. There are some pass/fail criteria, so if you’ve got some tricky tax set-up you’d fall at the first hurdle. After that, most could aim for it. The bar is set high, but running through the assessment to see whether you’re within touching distance of 80 is useful and thought-provoking.

You’ve recently been certified as a B Corporation. What does that entail?

Why did you want to get certified?

Did you have to make any changes to qualify?

How well does the assessment reflect the nature of architectural practice?

Do you think many practices could achieve certification?

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

Intelligence is approved RIBAJ CPD.
The chancellor’s welcome measures to keep businesses afloat during the pandemic could harbour a problem – zombie companies that are about to fail. What can you do to spot and avert disaster?

Paul Cacchioli

According to the latest data from the Construction Products Association, construction output in May surpassed pre-pandemic levels, with activity in 2021 and 2022 forecast to rise 13.7% and 6.3% respectively. Whilereductions in the workforce and a shift to remote working has accentuated by a fall in EU-born workers in the UK market, as many leave the UK in the wake of Brexit.

Materials shortages have been widely reported by market commentators in recent months, with over 100 construction firms identifying the ‘blockage of the Suez Canal, and global shortages of supply of core materials such as timber, steel and cement are beginning to bite. Alongside these problems, large infrastructure projects such as HS2 are monopolising available supply.

As for the workforce, an already growing shortage in skilled labour has recently been accentuated by a fall in EU-born workers in the UK market, as many leave the UK in the wake of Brexit.

Governance Act 2020 (CIGA), to protect companies with a formal process to explore and monitor for financial distress. However, an insolvency practitioner is appointed to help protect suppliers and provide some assurance.

Irrespective of a company’s position or avoiding various pitfalls:

- Ensuring it has a complete set of contract documents (including warranties and guarantees) as these documents are often not conveniently stored or are incomplete.
- Establishing a full list of the contractor’s suppliers, to validate the financial wellbeing of suppliers.
- Safeguard sub-contractors regarding payment, a lack of guarantees as these documents are often not conveniently stored or are incomplete.
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It is important that businesses remain alert and monitor their supply chain to protect themselves from any failures within it.

Afloat in choppy waters

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Profits hold up despite falling revenues

The RIBA annual benchmarking report shows reasons to be (cautiously) optimistic, with a resilient and fast-adapting profession emerging from lockdowns relatively intact.

This year’s RIBA Business Benchmarking report is the first definitive overview of the effects of the Covid-19 pandemic on chartered practices. In 2020, the overall UK economy shrank by around 10% and the construction industry by 14%. Ways of living and working changed overnight. Thankfully, 2021 has seen recovery and restrictions ease.

The 2021 report covers the first full year of the pandemic, including the effects of lockdowns and the early part of the 2021 bounce back. In many ways, it is a punishing read in which firms have cut spending, partly because of the furlough scheme. Falling payroll costs accounted for most of the reduction in average practice expenditure. Not all costs are down, however. Practices are spending 15% more on ‘software associated exclusively with architectural practice’ and an unprecedented 55% more on professional indemnity insurance than last year.

Overall practice revenue was down as the general economy, construction industry and architects’ market all contracted in response to the pandemic. But revenue by sector varied in line with the buildings people needed, as they made their way through the pandemic. Demand fell in sectors that support people gathering, with reductions of over 30% in revenue from work on offices, culture and entertainment, sports and leisure. However, as working at home became the norm for many, clients looked at adapting their homes during the months of lockdown.

Architects performed a critical service as the public reacted to the limitations of their homes during the months of lockdown. Demand fell in sectors that support people gathering, with reductions of over 30% in revenue from work on offices, culture and entertainment, sports and leisure. However, as working at home became the norm for many, clients looked at adapting their homes during the months of lockdown.

Almost all practice sizes have seen revenue fall – for some, it is for the first time since this survey began. Some of the biggest falls in revenue have been among larger practices. Those with 50-100 employees have seen revenue fall by 20%, with an 8% decline for those with 100+ staff. Practices with 50 or more staff account for more than half of all practice revenue, so these falls are significant.

But against falling revenues, chartered practices have impressively maintained profits at last year’s level, largely through cost reduction, continuing a trend we first saw in 2020’s survey. In part, expenditure fell as a result of altered ways of working: travel, for example, is down by half. But at 62%, payroll is by far the largest element of practice expenditure, and is the most significant area in which firms have cut spending, partly because of the furlough scheme. Falling payroll costs accounted for most of the reduction in average practice expenditure.

While practice revenue has fallen, chartered practices have impressively maintained profits at last year’s level.

The pandemic has required that change happen more rapidly than the more usual months or years. This has demonstrated an ability to adapt to market changes. The pandemic has required that to be rapidly accelerated, with changes to business strategy needed in weeks or days rather than the more usual months or years. This year’s RIBA Business Benchmarking report is the first definitive overview of the effects of the Covid-19 pandemic on chartered practices.

Adrian Maltese and Aziz Mirza

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While practice revenue has fallen, chartered practices have impressively maintained profits at last year’s level.

The UK architectural market is concentrated in London, with the capital having the highest average revenue per practice, and 63% of

Profits hold up despite falling revenues

The RIBA annual benchmarking report shows reasons to be (cautiously) optimistic, with a resilient and fast-adapting profession emerging from lockdowns relatively intact.
chartered practice revenue. But this year’s report shows that London practices are being particularly hard hit during the pandemic, with a 20% fall in revenue, and a diminished share of the UK market. Not that the rest of the UK has gone unscathed though. Most regions reported a fall in revenue, although for some it increased, partly due to a rise in domestic work. Those who fared better are the South, West Midlands, East, Yorkshire, North East and Northern Ireland.

International work continues to be a vital source of revenue, with practices generating more than £500 million from overseas work last year. Around one in six pounds of their revenue comes from work overseas. Led by the capital, the UK has a positive trade balance in architectural services: +£449 million at the last count. However, after two years of record highs, international revenue has declined by 14% compared to last year – similar to overall practice revenue. Practices with 100+ staff have seen the largest falls, with their share of overseas work down from 85% to 71% this year.

The Middle East remains the largest source of international work and along with the EU, Asia and North America accounts for around 90% of all overseas revenue. While practices with 100+ staff generate nearly all the international revenue from the Middle East, Asia and America, smaller practices do work overseas, mainly in the EU and other parts of Europe.

The future
As we look forward, the RIBA Future Trends survey suggests there are reasons for guarded optimism. Although the twin pressures of Covid and Brexit continue to weigh down on the supply side of construction, demand is holding up. Private housing led the recovery in architects’ work and that is now broadening with the commercial sector picking up in the second half of 2021. The fear of widespread redundancies has faded. At the peak of the pandemic effects, 20% of practice staff were on furlough. Now 18% of practices are reporting difficulty recruiting staff.

We hope the worst of the Covid storm is over, and practices can look forward to greater stability in 2022. •

The full 2021 report and interactive ‘Benchmarking Tool’ is exclusively available to RIBA chartered practices at www.ribabenchmark.com, for detailed commentary, granular data and the facility to compare your practice with similar ones. Our sincere thanks to those who completed the survey on behalf of their practices.
Panel system protects and allows speedy recovery from fire

Envirograf’s EnviroEcoWall is a load-bearing panel that not only prevents the spread of fire but is quickly and easily cleared and replaced after any outbreak.

Flood protection
Our EcoHouse is constructed on a purpose-built steel sub-frame that helps to protect the superstructure and building contents from damage caused by flooding. The sub-frame is Wrapped with fire resistant material for additional protection and, should prevailing weather conditions become more severe, the height of the sub-frame can be increased to permanently expand ground clearance of the entire building, even after construction.

Cost effective
Using our EnviroEcoWall panel system is more cost effective than traditional building methods. While some of the materials may initially be more expensive, the speed of construction combined with the drastic reduction of on-site waste make it more cost effective overall. In addition, the finished build offers the added benefit of improved thermal efficiency, and therefore saves money on heating bills in the long term.

Fire resistance
EnviroEcoWall panels are completely fire resistant, tested to over three hours with a load of 3,900kg.

Heat & sound
The panels have been extensively tested to evaluate their performance in insulating against the transmission of heat and sound. Air leakage associated with traditional construction and timber frame is virtually eliminated when using EnviroEcoWall panels thanks to their large format and the consequent small number of joints in the structure. As a result the house requires few, if any, mechanical heating or cooling measures.
How to bring steel into a green circular economy

Recycling – or better still, reusing – steel structures could create major carbon savings

Tom Webster

The urban mining of buildings is a true celebration of circular economy and has the potential to go a long way to reduce the embodied carbon of the built environment. While at a smaller scale, raised access floors and ductwork being upcycled and reused is increasingly common, does it make sense for this approach to be applied to the structure of a building? Of course, the answer is yes.

A standard office building, which is founded on piles and has a superstructure of a steel frame with composite slab, is likely to create around 1200 tonnes of CO2e during the construction of the superstructure alone. The original embodied carbon of this structure has been spent and has done its damage. If it cannot be refurbished we could mine this building to place the constituent materials back into the supply chain.

Steel is a woeful performer in terms of embodied carbon, but it is a great circular economy material, being recyclable without harm to its structural performance. This may come as a shock to some though – recycling virgin steel produces around just 50% of the original CO2e.

If we take this principle further things start to get really interesting. If we recycle steel elements within a building and replace it with a new timber frame building, we could potentially sequester enough carbon from the atmosphere to start creating an embodied carbon deficit.

A steel frame with composite slab is between 30–40% heavier than an equivalent timber frame. By leaving the original foundations in the ground and reusing them for a new timber building, it could be 30–40% taller. If we replaced an existing six-storey steel frame building with an eight-storey timber frame one, the embodied carbon in the frame would be: 540 tonnes CO2e to recycle the steel and 450 tonnes CO2e to build new timber building – but sequestered carbon in the timber amounts to -1500 CO2e.

So working through the numbers you can remove 550 CO2e from the atmosphere and provide a bigger building, while placing materials back into the supply chain for use elsewhere. And other types of urban mining could be more appealing to those less comfortable with use of timber in buildings.

There are a few projects under way in London where the superstructure is all or part formed using reclaimed structural steel from other sites owned by the client. This, as a concept, is a very pure version of the circular economy and urban mining.

In this form the embodied carbon is kept to a minimum and the additional embodied carbon would be associated with storing, cleaning, re-fabricating and painting the steelwork.

If the steelwork is reused rather than recycled, that embodied carbon figure potentially falls to 150t CO2e – presenting us with a staggering potential net 900 tonnes of CO2e benefit.

Steel is a woeful performer in terms of embodied carbon, but it is a great circular economy material, being recyclable without harm to its structural performance.
Profession returns to centre stage

The Building Safety Bill will give architects challenging responsibilities—and a welcome return of authority

Adrian Dobson

It is four and a half years since the Grenfell Tower fire in which 72 people died—the largest loss of life in a peacetime building fire since the Exeter Theatre Royal fire of 1887. The subsequent cladding crisis, which has left many tenants and leaseholders with huge uncertainty over the fire safety of their buildings and led to mortgage blight, indicates a widespread industry problem with fire safety. Already the Grenfell Tower Inquiry has raised issues of concern, including lack of independent oversight of product testing and construction, ambiguous and lax building regulations guidance and ineffective building control enforcement. Inevitably doubts about the competence of construction industry professionals have also arisen, including the need for the appointment of principal designers and designated individuals for all buildings, the delivery of a specific more stringent regime for higher-risk buildings, and promoting the competence and organisational capability of professionals, tradespeople and building control professionals working on all buildings. The BSR will oversee and monitor all building control authorities (local authority and approved inspector) and itself become the building control authority for higher-risk buildings, monitoring enhanced gateway processes and information requirements. It will take responsibility for the Approved Documents.

Accountable persons

The bill will create new duty holders in relation to building regulations compliance for all construction projects: designers, principal designers, contractors and principal contractors. For occupied higher-risk buildings, an identified accountable person will appoint a building safety manager. All architects will have duties as designers on all projects. As the bill is currently drafted, this includes ensuring that, if built, their designs would comply with all relevant requirements; providing sufficient information about design, construction and maintenance; and considering other design work and reporting any concerns to the principal designer.

For higher risk buildings the principal designer and principal contractor will be required to co-sign a ‘compliance declaration’

designer. Architects acting as principal designers will need to plan, manage and monitor the design work, ensuring that, if built, it will comply with building regulations. They will need to ensure that they and the designers in the team co-ordinate their work with the client, principal contractors and other designers. For higher risk buildings the principal designer and principal contractor will be required to co-sign a ‘compliance declaration’, which for the designer states that they ‘took all reasonable steps to fulfil their duties as a principal designer under the Dutyholder Regulations’. The RIBA has given comprehensive evidence to the Building Safety Bill committee. It has raised concern including the need for the appointment of the principal designer to be required at Gateway 1 (planning) on higher risk buildings, and for the wording of the duties to replace absolute obligations (‘ensure’ etc) with ‘so far as reasonably practicable’ obligations, to avoid creating unachievable liabilities. Clarity is also needed on the monitoring of construction for design compliance, especially in the design and build contractual context.

Architects for the public interest

The Building Safety Bill undoubtedly creates challenges for the profession over managing liabilities and achieving compliance, but, after several decades of diminishing power and authority, it also gives the architect a once in a generation opportunity to fully take on the serious public interest responsibility inherent in producing a built environment that prioritises the health, safety and welfare of building users and to move back from the margins to the centre of the stage. Although the legislation states that the principal designer role for building regulations might be carried out separately from that of the principal designer role for CDM regulations, it is clearly advantageous for a single design organisation to undertake this as an integrated role. The British Standards Institute is developing BS EN 8671, which sets out the competence requirements for principal designers (individual principal designers and designated individuals working under organisational principal designers) and the RIBA will develop a certification scheme for architects. The new arrangements will come into place during 2023. The regulatory tide is rising, and time for preparations is short. «


For higher risk buildings the principal designer and principal contractor will be required to co-sign a ‘compliance declaration’
Virtuous spiral

A new RIBAJ online series Making Buildings, will feature first-hand accounts of architects’ details, explaining the decisions that informed their thinking. Opening the series, Tonkin Liu director Mike Tonkin explains what drove the firm’s design for the spiral stair in its Stephen Lawrence Prize-winning Water Tower in Norfolk.

What ideas drove your initial design thinking for the staircases?

The decision to run the stair tower along-side the building was driven by all the water tank’s supporting structure at the top as well as the need to put all the accommodation in the volume below it. Floor to ceiling heights were tall in the original structure so a pure spiral stair would have been challenging for users, while a dogleg stair, with a landing at both ends, would have made the runs too steep.

We were initially inspired by traditional Georgian stairs – I grew up in Bath – and the way they run straight and then fan around at their ends; but more so by their French equivalents, which fan all the way along the run. Their form might have originated from right-handed knights defending Norman keeps but it seemed to apply very well here.

How does it meet building regs guidance?

Building regs say you’re supposed to have a landing every 16 stairs, but given that we were dealing with an existing condition, we explained to the building control officer that the stairs were going to be unconventional. The fans on the turn are quite big, which allows you to stand in the widest part while someone passes. There is also a regs requirement for a minimum of 50mm width at the tightest part of the turn but we exceeded that throughout. A lot of the design criteria fell between the regs for a spiral staircase and a straight stair. In the end, building control was okay with its hybrid nature.

So how is the stair engineered?

Along the lines of the way Robert Adam and Wren did their cantilevered stairs: supported at three points and delivering load down the outer unsupported edge – it’s how a compression spiral works.

The stair tower is four storeys high, yet our engineer Mervyn Rodrigues managed to get their structural thickness down to 80mm. The reason why they’re so thin is that the compression spiral is transferring most of the load down through the outer edge and so the strip foundations for the timber walls at ground level step in to take account of this.

The design is extremely simple. Small cut-outs for the treads were cut from the timber wall before they came to site. Each tread consists of two 80mm pieces of CLT and two layers of 4mm plywood making up the total tread rise. Every second piece of CLT slides into and engages with the wall, a shoulder on each one to ensure perfect alignment. The interstitial piece of CLT slides in and is mechanically bolted through to the next wall-engaged piece. With only every other CLT piece interfacing, we didn’t compromise too much of the wall’s structural integrity.

Left: The stair case’s continuous fan allowed the stair design to deal with the exiting floor-to-floor flights. Grd-2nd Fl = 80mm stair tread + 80mm wedge tread. 2nd-3rd Fl = 120mm stair tread + 90mm wedge tread.

Right: The prefabricated stair and wall elements were brought to site and assembled by two carpenters, who constructed it, tread by tread, in five days.
Section detail
1 CLT 80mm top tread with shoulder slotted into external wall screwed and fixed through.
2 CLT 80mm wedge tread
3 Two-layer 4mm plywood packing offset 10mm from tread front and back
4 11mm-diameter hole routed 15mm into external wall for M6 screw fixing
5 11mm-diameter hole routed 15mm into underside of wedge tread to M6 screw fixing
6 80mm CLT wall
7 60mm + 50mm layers Kingspan K12 Kooltherm insulation
8 Horizontal timber battens for cladding fixing at 1200mm centres
9 Vertical timber fixing battens to form 50mm air gap
10 Vapor barrier
11 Corrugated steel cladding

With each tread made up of two pieces, I suppose we thought to express that on its soffit where it steps. But it’s part of a tradition. Robert Adam created very sculpted undersides to his stairs that gave them real elegance. When you look up the well from below, it looks a bit like an optical illusion.

How was it built?
Like pretty much everything else on this building, locally. The glulam timber walls and treads were prefabricated by Binderholz and brought to site but it was assembled by two carpenters from the village who built the whole thing in five days, working from the bottom up. The client acted as the main contractor to make savings on the project and initially he felt we were being too sculptural with our design. But a steel stair would have been £15,000 per flight and a stone one £12,000. This timber one got built for under £7,000 including labour. It looks expensive but the irony is that it’s not.

What about Part B regs?
Regs have changed since Grenfell, and building control is understandably more risk averse. The fire officer looked at everything. Being the sole means of escape, this had to be a protected stair. There are mains-fed sprinklers on the ‘bridge’ to the water tower and in all the rooms, adding £40,000 to the project.

What’s the story with the balustrade?
Well, we got it for nothing! All the balusters are made from the many rusty tension rods that were removed from the tank structure, cut to length, grit filled into drilled holes in the treads. On the turns, we could have used one baluster to meet regs but it looked odd, so we decided to have two balusters per tread regardless. The effect is a visual tightening and expansion, which is satisfyingly rhythmic and sculptural.

What do you like most about the design?
I suppose it’s the effect the spiral design has on the integrity of the whole system: equalising forces and helping keep everything stiff. How many buildings with 80mm walls are four storeys tall? If you took the stair out, the walls would have to be twice as thick. The stair tower also takes lateral loads, helping hold the original tank structure in place. In effect, wood is stabilising steel, which we think is a lovely inversion.

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Half-Australian and half-Norwegian by birth, Max Creasy knows a thing or two about temperature extremes; in fact, his present home of Berlin, with its flaming Tiergarten summers and bleak, bone-chilling Tempelhof winters, would seem to suit the photographer well. But with a bloodline stretched between both poles, perhaps it’s understandable that Creasy would find himself attracted to other parts of the globe.

A snowboarder, Creasy’s taste for fresh crisp snows has brought him a few times to Japan’s north island, Hokkaido. Unlike the nearby port city of Sapporo, the remote city of Asahikawa sits further inland and so experiences more ‘continental’ winters than the coastal capital. 120 years ago, the city registered the lowest temperature ever recorded in Japan; and regularly, only those sacred thermometers placed atop Mount Fuji read colder. So it’s here, with its 7.6m annual snowfall, that the ski resorts maintain an icy grip on the hill slopes around the city.

But all is not as it seems in Asahikawa. For all of the wintering tourists forming a seasonal siege in ski-hotels around the city, Hokkaido remains 100 times less densely populated than Tokyo. Creasy, choosing to stay in its emptier centre, walked its streets with his camera, enjoying a silence more characteristic of the surrounding peaks. On just such wanders, it was, he tells me, the most banal architecture that most caught his eye. But this striking Battenburg cake, which he had been told was a veterinary surgery, in fact turned out to be a desolate apartment block – a confection of confusion.

And the city’s subterfuge was auditory as well as visual. Elsewhere, distracted nightly by raucous music and noise he’d heard emanating from a restaurant en route to his hotel, Creasy was finally tempted to venture in. Inside was deserted, the sound of fake customers on a PA there to drown out the stillness. He ate – comfortably – and alone; an Asahikawa more ‘apparition’ than après-ski… •

Jan-Carlos Kucharek

Photograph: Max Creasy
Asahikawa, 2017
Fuji camera with 80mm lens
Winning a RIBA Award has helped tangibly with the team, office morale and the appreciation that their work really matters. Beyond this, we are seeing that our profile is certainly heightened as the RIBA Awards are very well followed throughout the architectural and construction community.

David Tigg, Director at Tigg + Coll Architects

When we asked you last year what you most valued from the RIBA Journal – both here in the print magazine and online at ribaj.com – we saw the profession’s growth mindset writ large. Architects want to learn, you want to know more. As well as seeing more great buildings and reading about people and practices, the survey showed you want to know how those people draw, how they put things together, how they design and specify. And you wanted to better understand sustainability, the big picture and how to make sustainable buildings.

The continuing popularity of Michael Pawlyn’s guide to regenerative design on ribaj.com and the pieces on using the Plan of Works by its author, Dale Sinclair, show that you don’t just cast your vote for this sort of useful information to be included, you are actively seeking it out (to see the most popular 2021 stories visit ribaj.com/topofthepops).

We’ve come a long way from having to borrow a friend’s Jackie magazine to learn how to apply that bright blue eye shadow we spent our pocket money on. Nowadays we can see how to do that and watch how to change a bike brake pad on YouTube, or google the best way to unplug a drain. But the best insights always come with a spark of excitement: a way of doing a regular task so much better, the answer to a question that was only half formed in your mind, a connection from someone you admire that opens a new understanding.

This year we want to bring that to the fore in our wide coverage of architecture. We are calling it Design in the making. You will see the new elements primarily on ribaj.com – more useful, practical articles that are exciting to read, unveiling things you can learn from people you look up to and from talents you have not yet discovered. We preview one of the new pieces on p46 this issue. Many of you will have seen Tonkin Liu’s Watertower House on Grand Designs’ TV coverage of the RIBA’s House of the Year, but will have wondered how that CLT stair was put together, and squeezed into that space. And how did Tonkin Liu go about convincing building inspectors, and was the £40,000 on sprinklers worth it?

We are also tapping into the expertise of other design consultants, getting under the lid of the advice that can make collaborations so fruitful.

We are bringing you more competitions – look out in mid January for an exciting launch on this – and opportunities that can be so easy to miss in the midst of delivering projects. And we are asking you for more contributions on what you have learnt from projects and processes. It is not about dreary lectures in dull rooms (thank you LinkedIn Learning) or rushing through ticking off CPD points at the last minute while eating lunch at your desk. We want to entertain you. It is about making better design. It is Design in the making on ribaj.com. Go visit.
Sensory deprivation

Far away from any windows, the bowels of the building are a disorientating, claustrophobic labyrinth, says Will Wiles.

‘Why don’t history students look out of the window in the morning?’ ran a joke I heard when I was at university. ‘Because then they wouldn’t have anything to do in the afternoon.’ I heard it applied to several subjects, generally in the humanities – I have inserted my own to be polite.) A quarter of a century later, the University of California Santa Barbara intends to ruin those afternoon plans by building a mostly windowless mega-dorm. This neoclassical Borg cube, brainchild of university donor Charlie Munger, would house 4,500 students, more than 90 per cent of them in cells lacking any natural light.

In these divided times, it’s good to see people come together. And they did in condemnation of this proposal. The Munger dorm is ‘in a positique, sick joke,’ said the veteran architecture critic Paul Goldberger. ‘Prisons and lower-deck ships use exactly this model – think of the UCSB-Munger solution as bringing steerage class and San Quentin to campus.’

UCLA architecture professor and City Lab director Dana Carlow wrote in Dezen. Architect Dennis McFadden resigned from a university committee in protest. It’s hard to find supporters for the idea, but Munger himself remains paganous in his insistence that this turbo-tenement is not just acceptable, but what he views as a better world enlightened. He is so determined to demonstrate its benefits that he has told the university to take it or leave it – they can build it their way, or not at all.

I’ve been thinking about the windowless Munger dorm in recent weeks while engaged in an unglamorous business of trying to eliminate a rat from our kitchen. Our flat is on the corner of a modern block completed in 2013 and the kitchen in its innermost corner. Wherever our wayward invader came from, it wasn’t the outside – careful investigation discovered a hole chewed through a wall, behind one of the kitchen cabinets. What lay behind that wall? asked the exterminator. I had to admit I didn’t know. A stairwell, I thought, serving the flats above ours; but there are access hatches in the walls, suggesting that it might conceal a service shaft of some kind.

It was subtly disturbing that a mystery could lie so close at hand. Surely, even in a sprawling modern block, one should have some idea what lay only centimetres from where I stood washing up? Instead, I had guessedwork. And a name for the zone I believed to be there: the bowels of the building. Once the expression ‘the bowels of the building’ took up residence in my head, it refused to leave. It has ousted the rat, which was deadly enemy in the outerworld with the exterminator’s murder museli. I thought again of the Munger dorm and Carlow’s comparison with steering-class ships and spaceships. But what makes for the bowl of something that is not an animal? It refers to the innermost region but evokes more than that. The intestinal connection evokes a crowded region of pipes and ducts and services – it reminds one of the nightmareish plumbing in Terry Gilliam’s 1985 dystopian film Brazil, all shuddering tubes and pulsing bladders. It can be as uncomfortable glimpsing this stuff as it is seeing the equipment in the intensive care ward; a reminder of the effort needed to sustain life.

The bowels are a labyrinth besides natural light, windows provide a reference point with the outside world. Even if you can’t see much, they show you where the building is. They show you that the building has an edge, a reassurance that we don’t realise we need until we are without it – an idea I explored in my 2014 novel The Way Inn, about a motorway hotel that may or may not be infinitely large. Apart from claustrophobia – a very real concern in a building that is unlikely to be safe in a fire – the horror of the Munger dorm is disorientation, a loss of connection to the wider world. That is a form of sensory deprivation and can’t be solved by the most sophisticated artificial lighting. –

Will Wiles is a writer. Read him here and on ribaj.com

**FAT CHANCE**

Central to Munger’s design of the dorm is the desire to keep students out of ‘the rat race’ and to stay hidden in the use of its cost, deep plan communal areas. The idea is that this will stimulate their productivity and creativity – as formation of the ‘recurring training encounter fostering collaboration’ idea that now readily affects corporate and educational design, imposing deadlocking, wider stairwells and so on. I was surprised to find this in a college some years ago and questioned if there were any evidences worked.

Late in November, 500 people attended my ‘100 Days In’ address at 56 Portland Place, where I outlined the Culture President project that Buckminster Fuller described in 1969 as the ‘Operating Manual for Spaceship Earth.’

Fifty years previously, Alex Gordon, in his presidential address, coined the phrase ‘Long life, lose size, lose energy’. His world was very different – he spoke of public works and public practice; of fixed fees and the self-governing profession. But much was the same – he spoke of total design, of value not cost; of the need for good clients and our responsibilities to society. He also spoke of the irrelevance of petty internal squabbles!

Even in those heady days of fixed fees, he chose the title Architecture for Love or Money – a brave choice as, too often in architecture, money is too commercial and too tight to mention. Of course architecture drives us as but all money fuels that drive. Indeed, I would go as far as saying that while good cashflow can enable creativity, bad cashflow is sure to destroy it. That is why I took my 2014 now into major new disruptor schools, such as the London School of Architecture, where I am a trustee. I learned much from teaching at Harvard’s Graduate School of Design and its ‘conversion course’ and am delighted that apprenticeships offer a fourth way in. In last there is a large amount of choice, where artificial barriers between institute, practice and academy are disappearing.

In the ‘new normal’ – post Grenfell, post COVID – we must raise the standard of primary challenge. Darwin wrote ‘the species that survives is the one that is best able to adapt to... the rich environment which it finds itself in’. Today 38 per cent of the world’s CO2 emissions are the responsibility of the built environment so our infrastructure must adapt and fast. We must collaborate with the wider world of clients, consultants, contractors, manufacturers, regulators, the public and government to make sure that all projects demonstrate the standards that must be achieved. This is a global challenge and we are a

Adapt with optimism, these are exciting times but also exciting times, says Simon Allford
Collaboration was an appropriate theme for the RIBA Guerrilla Tactics gathering after more than a year of pandemic lockdowns, and threw up some novel and inspiring ideas and opportunities.

**Good for everyone**

The practice you are leading was a music band, and the band that most residents of the world would have heard was the Beatles. The band was made up of four members who collaborated with each other to produce music that was loved by millions of people around the world. This shows that when people work together, they can achieve great things.

**Different thinking**

A number of architects had seen wide-ranging collaborative opportunities on larger projects emerge by growing specific expertise, ZCD Architects and its co-founder Dinah Bornat have become synonymous with children’s facilities, a specialization adopted because, she said, “I was quite passionate about it”. Meanwhile, Peter George, Meridian Water’s strategy manager at public sector consortium Meridian, saw the benefit of working closely with the charity and stakeholders, he created a building that is synonymous with child-friendly cities, its co-founder Dinah Bornat have become synonymous with children’s facilities, a specialization adopted because, she said, “I was quite passionate about it”. Meanwhile, Peter George, Meridian Water’s strategy manager at public sector consortium Meridian, saw the benefit of working closely with the charity and stakeholders, he created a building that is

**More words of wisdom from the speakers**

- Gurmeet Sian, Office Sian Architecture + Design
  - ”To build engagement at any level and to start the collaborative process, you need to build trust, something we need to be less architect, and a bit more human.”

- Peter George, Meridian Water
  - ”With pre-bond events wherever possible, even if you’re not intending to bid. It’s a chance to develop a relationship with your local authority and a chance to ask questions.”

**Specification in the spotlight**

NBS was pleased to be part of the RIBA Guerrilla Tactics event to help inform and educate attendees about the importance of digital specification and how it helps create a safer and more sustainable built environment. During the event, NBS showcased NBS Chorus, the leading specification platform, and NBS Source, the innovative manufacturer product platform, and demonstrated how they help architects collaborate, manage risk, and work more efficiently. Find out more at www.thenbs.com.

**What next?**

For Collective Works, the financial burden of coming to a design competition led to a rethink. “Our solution has to stay away from competitions and spend that creative energy on passion projects and collaborative processes that we really enjoy,” said partner Sirri Zanelli. When a north London school commissioned the practice to design an outdoor classroom, but the architect, with a lot of architecture knowledge and skills, wanted to do it in a way that he knew would be successful. The architect, with a lot of architecture knowledge and skills, wanted to do it in a way that he knew would be successful. The architect, with a lot of architecture knowledge and skills, wanted to do it in a way that he knew would be successful.

If you’re thinking of moving to the city, then think about growing your own food, it’s good for you and good for the planet. And if you’re thinking of moving to the city, then think about growing your own food, it’s good for you and good for the planet. And if you’re thinking of moving to the city, then think about growing your own food, it’s good for you and good for the planet.

**Conclusion**

The practice you are leading was a music band, and the band that most residents of the world would have heard was the Beatles. The band was made up of four members who collaborated with each other to produce music that was loved by millions of people around the world. This shows that when people work together, they can achieve great things.
Takeshi Hayatsu's designs are about the people who'll use them and the context they're in - consciously putting the 'place' into 'placemaking'.

Words: Jan-Carlos Kucharek  Portrait: David Vintiner

Takeshi Hayatsu's office, in Assemble's Sugarhouse Studios maker's space in Bermondsey, seems shockingly small and intimate. You are ushered in to face tall shelves of models before a forced right: it is narrow, two shallow rows of desks facing the long walls, a window at the end. Sat at a work desk by the door during our chat, Hayatsu's softly-spoken voice is accompanied by the murmur of his five staff; at times I feel as if I'm interviewing them all. Hayatsu doesn’t seem bothered by this intimacy; perhaps it’s an innate Japanese ability to retain clear psychological distance despite physical proximity.

But there's agency in near-ness too. Apart from the big timber temple-like model looming from the far corner, none of the models that he reaches for are much more than an arm's length away. The shelves are testament to the architect's love of models – perhaps a nod to the 2D/3D 'okoshi-ezu' representations of Edo-era teahouses or perhaps his fascination with how things go together. It is an indulgence 6a architects couldn't sustain when he was a director there, says Hayatsu: 'I loved modelling and fabrication, even at early stages, but that was something I couldn't do there – my overheads were too high!'

For now, everything on those shelves is modestly scaled, which might be his comfort zone, but Hayatsu has the skills and ambition for bigger, he says. ‘An ideal size for me would be Churchill College (completed while at 6a) at nearly £10 million. It’s a lovely scale to work at while being different mode of operation, but the office would need to be 12 people, and growing by one person every year, perhaps in 2028…’ He clearly considers his skills base seriously, grafting new employees organically onto his company tree; growing it carefully over time, like bonsai.

And the craft of making is what makes him tick. The 51-year-old tells me he originally wanted to study fine arts at Tokyo's Musashino University but 'chose architecture as an easier examination route.' But he took to the subject naturally and, already an anglophile, found himself drawn to Archigram, inflatables and High Tech. When it came to his Archigram fascinations, it was Peter Salter's unit he gravitated to. ‘He had a profound influence on me,’ he says. ‘At the time, the AA was very much concept-based and few units were teaching building design. Peter’s was one of them. I didn’t know anything about...’
The RIBA Journal January 2022

The modernist has a clear sense of direction for the office – and all have been slowly coming to a firm that is clearly designed by architect Terunobu Fujimori constructed. Its 2017 show The Japanese House saw a teahouse curve and South London Gallery’s original and Fire Station buildings. By the time he had completed its extension and the London Library. Perhaps it was this refurbishment projects that sparked his interest in getting under the skin of buildings: ‘I think I was still being inspired by Peter Salter who was really into this kind of analysis’, he explains, adding that he did consider the conservation architect route at the time. ‘Steve [Haworth] and Graham [Tompkins] are modernists and concepts of old and new are distinct for them, but in the building conservation world I felt it wasn’t quite so clear cut.’ Hayatsu did look into a conservation of the area by architect Doig in north London. Bought from artists, it will be of a Victorian semi-detached house for artist Peter Doig in north London. Bought from artists, it will be moulded to the new owners’ taste while ‘taking on board the inheritance of the artists who lived there’. It involves a curious catenary dome structure in its ‘magical’ overgrown garden, with scalloped incisions so the trees can come close to the building. And, looking like he’s recycled fun Churchil e College by wrapping it around a big fat Havana cigar, his circular housing for Sanford House. 

The Parisian architect’s temporary pavilions pick up on the hippy Neolithic alignment of the 1967 new town, its ‘Fowest City’ appellation and the city as a grid. Japanese boulder ‘kyscenes’ anchor the timber pavilion to its site, referencing Stonehenge and picking up on the Mesolithic stone caches that typify MK’s civic buildings, working them in with shoji screens that echo the city’s grid. ‘It’s not just spending more time on Excel spreadsheets than was my motivation, Hayatsu says. ‘It’s not quite so clear cut.’ Hayatsu did look into a conservation of the area by architect Doig in north London. Bought from artists, it will be of a Victorian semi-detached house for artist Peter Doig in north London. Bought from artists, it will be moulded to the new owners’ taste while ‘taking on board the inheritance of the artists who lived there’. It involves a curious catenary dome structure in its ‘magical’ overgrown garden, with scalloped incisions so the trees can come close to the building. And, looking like he’s recycled fun Churchil e College by wrapping it around a big fat Havana cigar, his circular housing for Sanford House. 

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All our yesterdays: a wander through extinct ideas

Do you remember serving hatches and ashtrays, fountain pens and slide rules? Pamela Buxton delves into a new book celebrating ideas that have done their time

Extinct – A Compendium of Obsolete Objects, is the sort of publication that makes you feel old. It’s not those now-discarded but once highlighted ideas from the distant past that are the problem but rather those still in living memory – the paper airline ticket, Letraset, fountain pens, ashtrays and of course the Sinclair C5.

That happy thought aside, this new book from Reaktion is a delight to peruse. Rather than mocking the failed, superseded or outmoded, it is more of a celebration of 85 extinct objects and the visions that drove them, as nominated by a range of historians, curators, architects and artists.

The four editors set the scene for these nominations with an introduction examining the nature of what constitutes extinct, along the way discussing ideas around natural selection, progress, technological innovation and consumerism. They are driven, as nominated by a range of historians, curators, architects and artists.

The featured objects are a wonderful selection. Many contributors have nominated superseded concepts or items or technology. Former Design Museum director Deyan Sudjic chose the ‘beautiful and entirely contemporary-looking’ Polaroid SC-70 while Tony Fretton nominated the Rotring, Letrasetone and MiniCAD of the pre-digital architectural office. Shaled Suleman, design studio leader at the University of Westminster School of Architecture, nominated the Minitel, which was, he notes, ‘a French Internet before the Internet as we know it today’. Obsolete domestic items include the telephone table, the integrated radio/TV cabinet and the serving hatch.

Extinct architectural objects featured include the all-plastic House which reached its peak in the 1950s and early 60s, most famously with the Futuro house by Matti Suuronen and the House of the Future designed by architects at the Massachusetts Institute of Technology. There’s also Buckminster Fuller’s Dymaxion House, a factory-made kit-house which attracted thousands of orders – though only two were produced – and the Space Frame structural system. William Harries’ account of the Visionary North Bucks Monorail City proposed in the 1960s makes for fascinating reading.

It’s certainly food for thought – how many of the items we use daily today will one day have a similar fate? In Station Eleven, the prescient novel by Emily St John Mandel about a global pandemic, some of the survivors put together a Museum of Civilization populated by redundant exhibits such as a credit card, a games console and a mobile phone, all rendered irreversibly obsolete. They’d surely all make it into a future version of Extinct – but what will replace them is far harder to predict. »
Margaret Finch 1925 – 2021

Young women entering the architectural profession in the post-war years required great determination and skill to advance. Margaret Finch had these qualities, combined with elegance and charisma. She worked within an enlightened group of architects, engineers and designers, looking to rebuild a post-war society with a new vision.

Margaret grew up in north London, with a father who worked for a piano manufacturer in Camden. Winning a free place at North London Collegiate School opened the way to pursuing the career of her choice, and she went on to study architecture at the Regent Street Polytechnic during the war, one of only seven women in her year. Her husband Richard – or Dickie – was a fellow student, although his studies were interrupted by his army call-up and three years of service in the Middle East.

Margaret's first job was with the London North East Railway near King's Cross, working on infrastructure projects. Despite her qualifications, she was paid less than her male colleagues. On taking issue with this she was told her pay was 'sufficient for a young woman'. In 1948, after being told by the Middlesex County Council working on schools, she joined the office of Denys Lasdun and Lindsay Drake, a partnership that had evolved from the break-up of Tecton, one of the most influential modernists. Margaret loved her time there.

In 1958, Dickie set up on his own when Middlesex County Council offered him a commission for a school, sharing office space with his former Festival of Britain colleagues Gordon and Ursula Bowyer. More work followed, giving Margaret and Dickie the confidence to follow the pattern of husband and wife partnerships established by Fry and Drew. Projects for local authorities included schools, housing and what were then called residential blocks.

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After the founders joined forces with Maxwell Fry and Jane Drew – as Fry Drew Drake and Lasdun – Margaret travelled to what is now Ghana as site architect supervising the construction of a new village at Tema on the outskirts of Accra. It combined modernism with courtyard dwellings that reflected the local culture and was part of prime minister Kwame Nkrumah's plan to modernise the economy of the British Gold Coast colony with housing, schools and an industrial infrastructure. Margaret loved her time there.

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In 1964 book, Modern Buildings in London, Ian Nairn described Hallfield Primary School as 'one of the most innovative school designs put up since the war'.

The design concept of the district is detached little gems buildings, which maximizes the external wall area. The Canteen café is outrageous – its external wall fabric is only a single skin of transparent plastic, the guys serving at the coffee bar by to the entrance were suffering from exposure on that late November day. Heating the Canteen will take excessive energy.

Alec Morton Taylor Elected 1956, Herefordshire

We don't value construction workers highly enough; they are the butt of jokes and assumptions such as 'plumber's smile' and 'builders' tea'. No wonder there is a dearth of people lining up to fill their places.

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Although founded in 1934, wholesale firm Finmar’s heyday was post-war, when Britain’s general public became increasingly interested in Scandinavian design. The business was created by architecture critic Philip Morton Shand to import Alvar Aalto’s plywood furniture from Finland; but from 1949, with new director Paul Ernst Stemann at its helm, it shifted focus to Denmark and soon became one of the main importers of Scandinavian goods to the UK. By 1954 it was selling furniture to Liberty and Heals, and had commissioned James Cubitt and Partners to design its first large showroom in London. The site was a tall and narrow former textile warehouse, arranged over several floors; the architect converted it with minimal changes to the existing structure, but at the same time introduced experimental ways to display the showroom’s content – the new fittings were described by Architectural Design as ‘elegant and concise’. The basement floor, seen in this photograph, featured an illuminated fishpond and was visually connected to the ground floor by a vertical display of chairs suspended from the wall. • Valeria Carullo
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