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Buildings



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Participants don a pair of VR goggles and

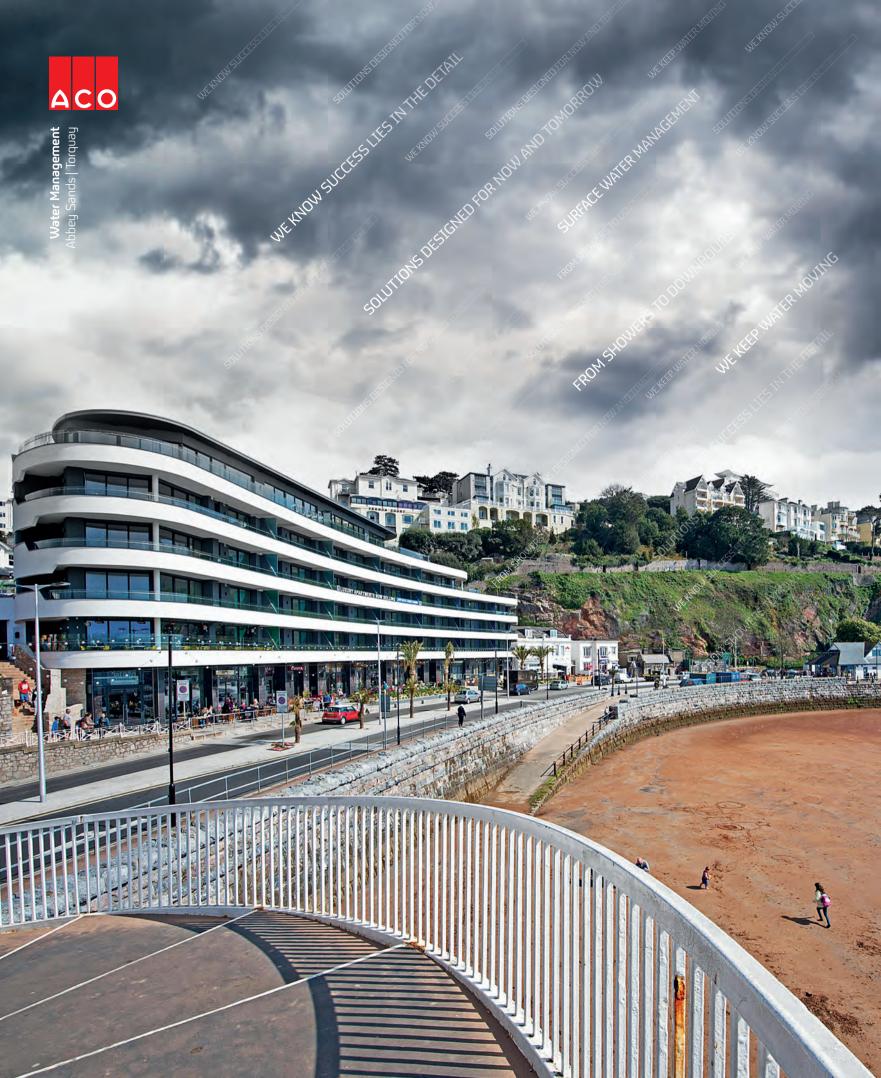
climb into one of four specially designed

swing frames cantilevered from trees, to

Stephen Cousins finds City workers celebrating

Leonardo's birthday by experiencing flight:

experience the sensation of flight





Location of case study Abbey Sands, Torquay, Devon.

Project requirements

Building of a new six-storey mixed-use development in a sensitive historic development, to bring in visitors to the area.

The solution

A new shared space scheme prioritising pedestrian movement including stainless steel ACO Brickslot gratings to cope with the coastal conditions.

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The Abbey Sands project is a contemporary interpretation of early 20th-century British seaside architecture. The scheme sits at the centre of Torquay's mile-long promenade and includes 4 restaurants, 14 open-market apartments and 14 serviced apartments with parking.

A shared space area outside prioritises pedestrian movements between the waterfront, promenade and nearby Royal Terrace Gardens, where ACO Brickslot drainage is an unobtrusive choice in this historic location.



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1: Buildings

Things, as the famous song had it, can only get better. Nonsense: things can also get much worse. But not in the case of the buildings and places in this issue, each of which makes a case for the former rather than the latter, the power of good architecture to ameliorate. A one-time coalmining wasteland in northern France? Now a UNESCO World Heritage site, its previously derelict worker housing attracting tourists. An unloved corner of a hospital car park? Now occupied by a beacon of support and hope in the form of an intelligently low-budget Maggie's Centre. A former warehouse site in Cambridge? Now

the most interestingly designed new mosque in the UK. A huge derelict brutalist Royal Mail sorting office in Northampton? Now imaginatively and sustainably upcycled as an academy. And finally, the whole of Birmingham. Well, large chunks of it. The planning mistakes of the 1960s continue to be corrected. Here caution is in order. If comprehensive redevelopment failed once, it can fail again. There is always collateral damage, like the loss of the former city library by John Madin. But continuing to move the city away from total dominance by road transport infrastructure while increasing its vitality? Yes please. •

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The first tree they took down was cut up and sent for testing — it had a strength similar to oak. It worked a treat, but the next 30 didn't

Hugh Pearman on experiments with sycamore at Derek Latham's near zero energy house in Derbyshire: ribaj. com/lathamhouse

The rebirth of a French mining settlement, page 14

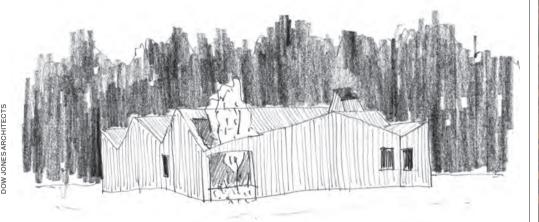


VTÉALE

Enter another world

Dow Jones Architects has added another welcoming, comforting space to the Maggie's pantheon with its timber-rich building in Cardiff at Velindre Cancer Centre

Words: Eleanor Young Photographs: Antony Coleman



Designing for a car park spells the birth of many of the Maggie's cancer caring centres. Most hospitals are still accretions of extensions and additions, corridors and walkways. Velindre Cancer Centre, in Whitchurch, Cardiff, is no exception and in its parking lot Dow Jones has created a strong form that holds its own in this unpromising nowhere place. More importantly when you are inside you are in a completely different world.

Maggie's centres are places for those with cancer, or affected by it, to drop in and have a cup of tea, talk to those who understand about cancer, go to a class or meet for some therapy. They are places where there is time for questions and a soothing beauty and, hopefully, a sense of home. The RIBA Journal has covered many of them – since Maggie Keswick Jencks was involved in setting up the first one when

she herself had cancer – through commissions of architectural stars such as Frank Gehry and Rem Koolhaas, pulled in by her writer husband Charles Jencks.

Dow Jones has been working on a Maggie's for Whitchurch since 2011, initially next door on a site where the whole hospital was due to be rebuilt. Delays and a potential new site for the hospital, plus money from the Welsh government for this Maggie's, meant it has gone ahead with an immediate solution on an unpromising triangular site, which might eventually change. This is not strictly a temporary building but its budget reflected a more limited life span and it is smaller than many Maggie's (250m² compared to 350m² elsewhere).

Sandwiched between the car park and the angled brick pavilions of the derelict









The roof's peaks and troughs add character and make the building less of a visual barrier

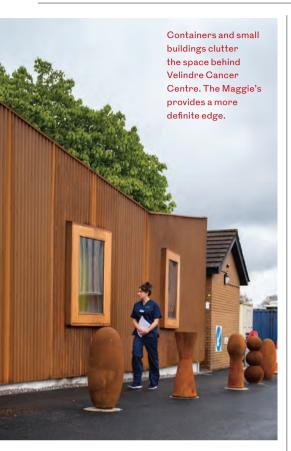
Whitchurch psychiatric hospital, the centre borrows the neighbouring tree line as a green background to soften the impact of the ranks of cars. The peaks and troughs of the roof give the building character – inside and out – and make it less of a visual barrier. Dow Jones' reference was the hills of the Brecon Beacons. Its domestic scale denies the weathering steel an industrial reading, but it has a strong presence, its material and sculptural quality emphasised by bollards designed by Anthony Gormley.

Step through the portal into a small, protected, courtyard and you are immediately in a different world. Beyond the amelanchier tree climbing through to the sky you see into the cross laminated timber interior and lofty landscape of pitched soffits marked out with timber rafters. Once inside, as with other

Left Inside the cwtch, timber to head height then ascending blue. Curtain and cushions are inspired by Welsh blanket designs. Above Water spouts off the roofs will shoot rainfall into the drains.

Buildings

Cancer care centre



Maggie's, the familiar process of tea making takes centre stage with kitchen unit and table. But your gaze is drawn out to the trees at the back of the building, under the canopy of the extruded roof scape. Other spaces flow from the centre: a yoga studio/activity room with double doors, rooms for therapy or private discussion, a small office. All that is not visible are two more intimate spaces.

One is made by the other. A tall, chimney-like volume rises up through the tea room to the roof. Step through the gently draped curtain and you are enclosed in timber cwtch (Welsh for cuddle or cubbyhole), the light coming down from high in the roof



Ground floor plan

- Terrace
- Studio
- Kitchen and dining room
- Cwtch
- Library
- Courtyard
- Office
- Small room
- Medium room



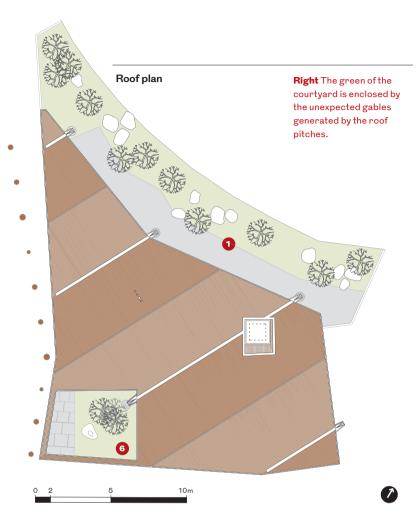
Below left Exposed rafters rest on white painted steels about the CLT walls, giving a lofty space above the Maggie's kitchen table.

Below View from the

edge of the building,

linear terrace.







above. The wide bench doubles as a space to lie down. It is like being inside a huge chimney breast, and was inspired by a 16th century Welsh farmhouse. It forms the other hidden space, at the end of the building; two chairs gathered in conversation in front of a stove and its tiled backdrop, known as the library.

The pressures of build and budget are visible where roof angles and wall meet, in quite ordinary toilets, in a cupboard where the shelves function rather than delight – things barely noticeable in buildings less special than this. The biggest pressure has been on space. The building is hard up against car park, roads and Velindre's mortuary and at the back barely steals space for a narrow outside terrace.

Dow Jones has made the most of the limitations, giving a sense of depth with deep window mullions, door frames and skirting boards. As with other Maggie's centres the textiles and crockery, the domestic elements of the space, are very important. Mug and plates by Lisa Krigel look like rough Bernard-Leach-style pottery but are smooth to the touch while the Welsh blankets, with their reversible weave, are used for cushions and curtains too. These give the space a more,

It is like being inside a huge chimney breast — and was inspired by a 16th century Welsh farmhouse

familiar, personal sense of someone making the space friendly. Outside, generous rainwater spouts shoot away from the building; delicate drain covers accept the wet.

These small things matter as much as the big moves. It is only when you step away and into the hospital again that you realise the relief the building itself brings. •





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Barn, Salway Ash, Dorset

Words Jan-Carlos Kucharek Photograph Jethro Marshall

Eleven years ago, tiring of the banality of dinner party conversation in London, fashion art director Jethro Marshall moved to west Dorset with his young family. But while he may have left the bright lights and big city, the urge to think creatively about his environment remained. West Country Modern was the result – an ongoing photographic project documenting the rural landscape he lives in with the aim of countering accepted notions of what the pastoral is and how it is

represented. 'In the first of three books on the subject, I started by making a critical photographic study of local agricultural architecture,' he tells me: inspired, he adds, by the work of Bernd and Hilla Becher. 'I ended up calling it "Farm follows function".'

So Marshall circumvented the bucolic, golden, 'Cider with Rosie' view for dispassionate, black and white, nuts and bolts representation. On the Devon/Dorset border, so many aspects of this barn structure caught his eye that he felt it deserved a portrait. He delighted in the curious interface of the curved metal roof with the new wings, added where the original barn walls had been

removed. Marshall responded to the wings' vented timber half-walls, giving them a real sense of lightness; and at the base of all that wood and corrugation, an asymmetric breeze block wall acting like some form of rural rustication – a 'brutal set of materials' that, together, took on its own strange beauty.

Following it up with the later 'Coastal brutalism', that looked at concrete at the seaside, he is planning his third volume on the area's rural roads – a study that, by default, may be devoted as much to Devon's hedgerows as its lanes. A long and winding read, one presumes; a concrete bus stop serving as an occasional caesura.





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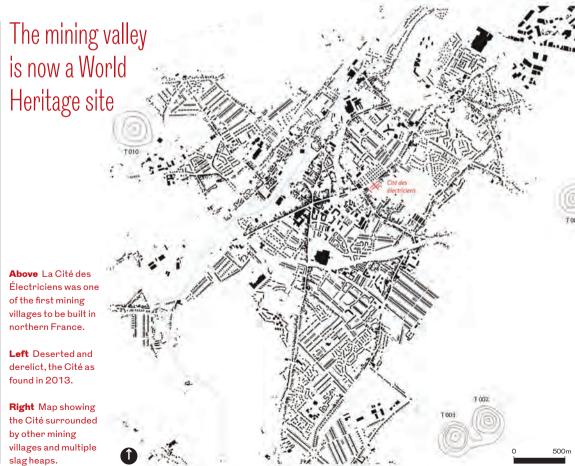




When you're driving south along the A1 from Lille in northern France, or coming from Paris in the opposite direction, there's a moment when the relatively flat, uninteresting landscape recedes and suddenly you're in a valley formed by mountainous slag heaps. Nothing prepares you for it. One minute there's nothing, the next slag heaps are everywhere – all sizes, types and forms, conical, plateau, truncated and 'modern'.

Thirty years ago, the sight might have caused rear seat passengers in the car to hunker down and hold on tight. The mounds loomed large and dark above the landscape and so did everything they stood for. Man's activities prised nature from this place until they suffered the same fate. But today, green-





The RIBA Journal July 2019

ATELIER D'ARCHITECTURE PHILIPPE PROST

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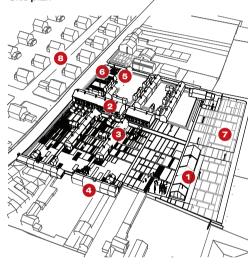
ing at their bases, the slag heaps are the most visible remnants of a period in our social and industrial history whose passing people are just about coming to terms with. The fraught political ending that took place decades ago – strikes, unemployment and upheaval as the government closed down the then nationalised coal industry – has blown away with the coal dust and an appreciation of the people and places which enabled that history has descended, accompanied by a sprinkling of money and remembrance.

Now, when you cross that point on the motorway, it's not just slag heaps you see, there is also a sign explaining you are entering a UNESCO World Heritage Site – a protected landscape status that most would have found laughable until very recently.

The bassin minier – valley of miners – as it is known, stretches in an arc 120km long and 20km wide from the Belgian border east of Valenciennes over the départements of Nord and Pas-de-Calais to the west of Béthune. It was awarded its status in 2012 as a cultural, evolving, living heritage. It's not just the slag heaps (51 of the circa 350 are listed), that matter though, it's the whole set-up – the urbanism, methods of construction, materials and ways of life that look so ordinary until you think twice about them.

Coal mining on an industrial scale didn't

E15m Total contract cost 2,600 Cost per m² 1,572m² Total GIA renovated and new build Site plan



- 1 Interpretation Centre
- 2 Museum about the Cité
- 3 Studios/accommodation
- 4 Holiday cottages
- 5 Renovated social housing
- 6 New square
- 7 Visitor car parking
- 8 Later miner housing

begin here in France, but the characteristics that developed in this region are unusual and intensive. The huge mural in the new centre of interpretation designed by Atelier d'Architecture Philippe Prost (AAPP) in Bruay-la-Buissière shows how from the 1720s deeper mines, advancing methods and greater volumes transformed a primarily rural landscape into an industrial one of pits, shafts, processing plants and worker housing.

Land was cheap so industrialists bought it speculatively to test for coal. If none was found, they would use it for equipment and ancillary buildings or housing for the vast numbers of people required to work in the mines, who came from all over the world. Buildings were mostly low-rise and horizontal because they cost less. Consequently in addition to the slag heaps the UNESCO valley contains 800 models of workers' housing; 80,000 homes spread over more than 700 mining villages or estates. Most of them were made using the red clay from the companies' land, fired using their own coal and designed by their own engineers.

AAPP's Interpretation Centre is in one of the earliest of these villages, la Cité des Électriciens, built by the Bruay Mining Company between 1856 and 1861. By 1918 production was 4.5m tonnes a year and the firm employed 20,505 people. But when the



NTÉALE

Buildings

Open air museum,

This is the simplest type of architecture with its roots in agricultural buildings

houses were built, most of the miners would have been former agricultural day labourers. Without alternative reference points, the architecture of the Cité was equally transitional – 43 low, long narrow houses of 30 to 50m² in seven 'barreau' or terraces of four or five, some back-to-back, designed to accommodate families plus their chickens and rabbits.

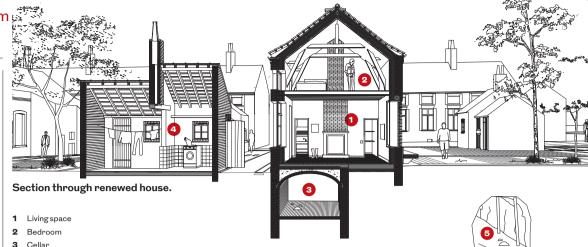
'We are at the first rung of the ladder,' explains Prost. 'This is the simplest type of architecture which has its roots in rural and agricultural buildings.' Each plot had a garden for growing vegetables, a fruit tree and house with a coal bunker in the cellar, open living space on the ground floor and bedrooms in the attic. Other facilities – the bakehouse, latrines, washhouses and wells – would initially have been communal before private outhouses were built by the company to improve hygiene and thereby productivity.

Today people from outside the bassin minier view it with new curiosity and wistfulness. But as recently as 2008, in the film Bienvenue chez les Ch'tis, this Cité played the role of a depressed, sparsely populated town of outrageously coarse and uncivilised people, a comical send-up of how the rest of France stereotyped this part of the north. The pits closed in Bruay in 1969 (coal mining finished across northern France in 1991) and it was in a state of 'extreme dilapidation'.

Yet the film became the highest grossing in France and shone a spotlight on what a unique and culturally significant place it is. By the time Prost arrived on the project after winning a competition in 2013, the last miner's widow had just departed, and walls moved if you touched them.

The aim of the project was to restore the site to its early condition. Half of it has been reinstated as social housing by Maisons et Cités. The other half has become a type of open-air museum, which director Isabelle Mauchin says was conceived to communicate to locals the importance of the mining valley and why it has been awarded protected status. It is a gateway for visitors to the region too.

As the architect of the lauded Ring of



Below View of the bedroom from the bathroom of one of the

new holiday lets.

4 Utility and drying room

Bottom Some areas of wallpaper and flooring have been preserved in the museum about how people lived in the village.



Remembrance nearby, for Prost the project is therefore a memorial and rescue. The inhabited houses have been refurbished and extended to provide modern accommodation with low fenced gardens and a square to the road. The rest of the site is open to the public. The largest terrace of back-to-backs is now the museum of the Cité itself, its collection of artefacts showing who lived in the village and what life was like. Openings between the 10 houses create a series of linked spaces that recall the previous houses but give a level of continuity to the exhibition - photographs, audio, news cuttings, snapshots of the layers of wallpaper and lino that were found in situ when the project began. You can peek down the horrendously steep stair to the cellars and enter two bedrooms as they would have been, washed with green and ultramarine.

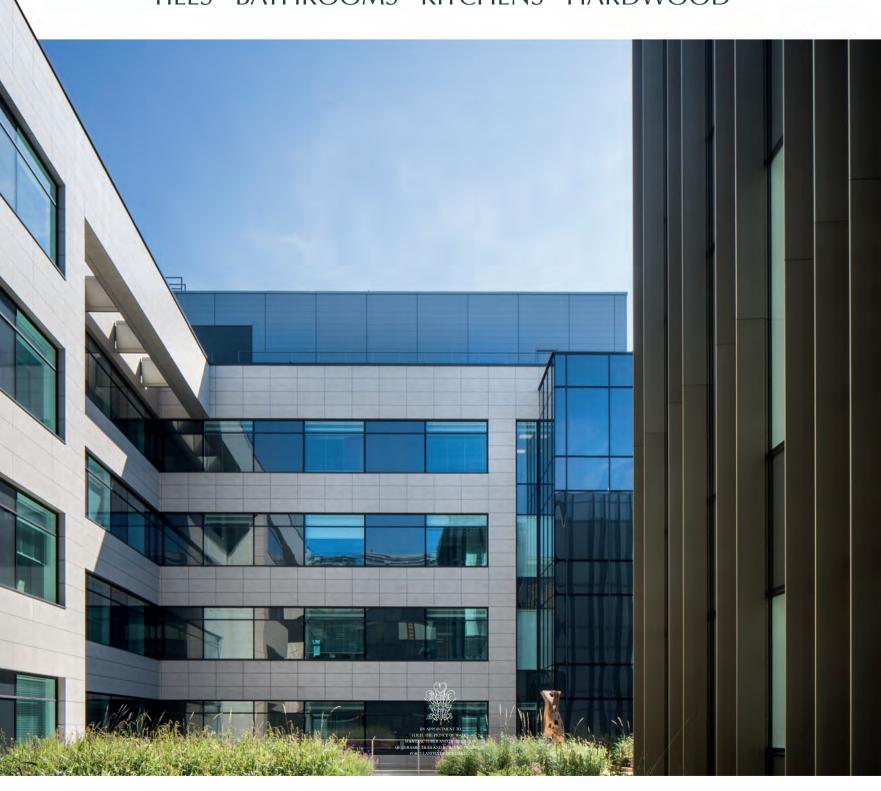
Elsewhere, the former miners' houses have become studios, gallery spaces and accommodation for artists in residence, as well



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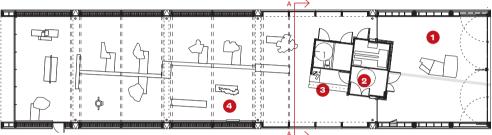


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as five holiday lets. Here, again, the approach has been to knock multiple homes together to make bigger, more contemporary spaces. If ceilings had collapsed the spaces have been left double-height.

The only new building is the interpretation centre, which sits on the footprint of a temporary shelter to house refugees, built by the mining company during World War I and destroyed by fire in the '90s. Volumetrically it is a replica of the larger barreau, constructed using lighter, more sustainable materials of today; wood, recycled denim insulation and glazed tiles. The design bridges inside and out, providing an open space that, Prost discovered, would not have been possible within any of the old terraces because of their fragile condition. The new building's glazing repeats the rhythm of the houses opposite and its red glazed tiles transfigure the brick as a rainscreen. A reception cabin at the threshold playfully recalls the outbuildings.

Overall, from the exterior the project is masterful – faithful and inventive. The gardens have also been recreated by landscape designer FORR to demonstrate how miners used their plots, based on analysis of hundreds of photographs and intense research into the flora found, including dozens of grains brought by immigrants. The new centre feels very much of the red and black, clay and coal it was intended to evoke. The restor-

Interpretation Centre ground floor plan.

- Covered entrance
 Lobby
- 3 Reception
- 4 Main exhibition space

Below The outhouses (right) were added later. Each is a series of attached buildings with a latrine, washhouse and chicken coop.

Credits

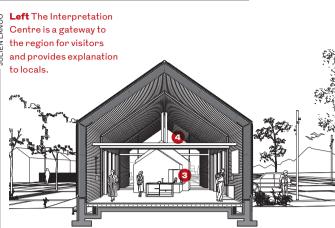
Architect Atelier d'Architecture Philippe Prost

Client Communauté
d'agglomération de
Béthune-Bruay, Artois-Lys Romane

Engineer Verdi Ingénierie

Landscape FORR

Exhibition design Du&Ma
with Catherine Mariette



Interpretation Centre, section A-A.

ation transports you to an in-between time at the dawn of the industrial revolution in this part of France: semi-bucolic, communal, if portrayed quaintly.

However, when it comes to the interiors of the restored buildings, too much has been stripped away, joined together, plastered over, concreted and renewed. The buildings have lost touch with their previous lives and inhabitants; they have been sanitised into generic contemporary spaces. Surely the charm of renting one of the cottages is to live, just for a few days, like a miner may have done, a bit cramped but cosy? That cannot be undone, but the project is still an enjoyable, important and admirable one that raises the profile of the mining valley and shows there is more to it than just its slag heaps – a change of mind-set that could be useful elsewhere.



VTEALE

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Geometry of compassion

Marks Barfield's long-awaited, £23m Cambridge Mosque marries Islamic tradition and contemporary form to make an optimistic landmark for the city

Words: Shahed Saleem Photographs: Morley Von Sternberg

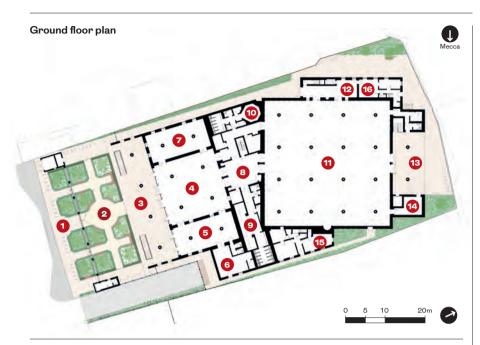
Left All worshippers enter the building through the atrium, which serves as a multi-purpose space. On a Friday shoes are arranged across the floor as the prayer hall fills up.

Below The building is low rise with a facade formed of a structural timber colonnade and portico, set behind a public garden. 'It is the most incredible masjid I have ever seen', says my Afghan taxi driver, barely able to contain his pride, and refusing to take a fare for bringing me here. Mill Road's radical political history still leaves the area with a bohemian feel, rows of 19th century workers' terraces sit behind small businesses, charities and independent shops. Sitting calmly amid this low rise and eclectic landscape, set back from the street and behind newly planted trees, is the city's first purpose built mosque, by Marks Barfield Architects.

A new mosque for Cambridge has been a decades long vision of Muslims in the city, the extant mosques being converted premises which were inadequate for the growing local, student and international Muslim population. Spearheaded by Dr Tim Winter, a Cambridge academic and Islamic scholar, a group of



CritiqueCambridge Mosque



the city's Muslims came together to realise this vision. Large sites for new builds are scant in the city, so when a former John Lewis warehouse on Mill Road was offered to them in 2008 they frantically fundraised the $\pounds 4$ million required to purchase it.

And so the Cambridge Mosque Project was formed, a coalition of community activists, academics and religious figures, and the new mosque initiative began in earnest. At the heart of its design was a simple question; what should an English mosque look like? The question resonated with the multi-cultural Muslim community of the city, and was intended to be a continuation of the

- 1 Community garden
- 2 Islamic garden
- 3 Front portico
- 4 Atrium
- 5 Cafe
- 6 Kitchen
- 7 Teaching
- 8 Lobby
- 9 Male ablutions
- 10 Female ablutions
- 11 Prayer hall
 12 Mother and
- 12 Mother and child space
- 13 Rear portico
- 14 Mortuary
- 15 Imam residence
- 16 Student residence



historical tradition of mosque architecture which has always adapted to the new places Muslims settled into.

An invited design competition was held which included entries from Mangera Yvars and 5th Studio, and a range of proposals described by Winter as varying from 'brutalist concrete... [to] Star Trek futurism, replicas of medieval Syrian buildings, and revivals of Victorian architecture'. But Marks Barfield prevailed with a scheme rooted in the symbolic and spatial traditions of Islamic architecture, delivered in contemporary form, material and method. This vision has been realised 10 years and £23 million later, the funds raised through tremendous community support bolstered by a few large donors from Qatar and Turkey.

Newly built mosques in Britain tend to be bold expressions of Muslim identity, usually deploying familiar tropes of domes, minarets and arabesque decoration. Cambridge Central Mosque avoids this, apart from the dome, and instead embeds its historical reference in the plan and the sequences of spaces that this creates. David Marks, speaking in 2013, explained how originality was the design's guiding principle, where the word is understood in its true meaning, 'from the origin,' not, as we might think, completely new.

Left In the main prayer hall a grid of structural trees spreads to form a geometric canopy. They evoke both gothic fan vaulting and the framed vistas of historic Islamic architecture.



Accordingly an underlying geometry, 'the breath of the compassionate' which is rooted in Islamic tradition, has been designed for the mosque by Keith Critchlow, an expert in sacred geometric art. This geometry, signifying the universal and sacred, infuses the building from the plan to brick bonding patterns, from the atrium floor tiling to the door marquetry. Though it is not about copying, Marks pointed out, but inventing anew.

The result is a building that prioritises inner experience over external expression. From the street you first enter a public Islamic garden, symbolising paradise, which leads to a portico, after which is an atrium leading onto a hallway, and then, angled slightly to face Makkah, the prayer hall. This procession of spaces leads systematically from the outside world into the sacred, a glazed curtain wall between portico and atrium forming the facade which, when the interior is lit at night, appears transparent.

What characterises this building, however, is not just the syntax of the plan, but the grid of dramatic spruce timber structural columns from portico to prayer hall that rise into flowing, curving, geometric patterns, fanning across the ceiling. Julia Barfield describes how gothic fan vaults, a specifically English invention and exemplified in the nearby 16th century King's College Chapel, as well as the repetitive arches of the Cordoba

IN NUMBERS

£25m total contract cost

2,556m² mosque GIFA

2,342m²

Opposite The mosque places men and women in the same prayer hall, separated by a screen of varying heights.

Below Worshippers approach the mosque through an Islamic garden representing paradise, which is open to the public. mosque, are conceptual references for the unfurling Islamic geometric structure vaulting across the Cambridge mosque ceiling. It is this merging of tradition and modernity, inner and outer, Muslim and non, that lies at the heart of the new mosque.

Alongside this conceptual underpinning, the mosque's ecological impact is explained as integral to its sacredness by both Winter and Barfield, who are passionate if not evangelical on this topic. The building aspires to a minimal carbon footprint, and describes itself as 'almost carbon neutral'. The superstructure is cross-laminated timber with external brick cladding patterned in traditional Kufic styles which, along with high levels of insulation and air tightness, ensures ultra-low U values. A series of mixed-mode systems keep energy use to a minimum; static heating, natural ventilation, air sourced heat pumps, a PV array, rainwater harvesting, natural daylighting throughout - this building has it all. For both client and architect, this is about ethics over and above meeting regulatory requirements.

Ethics are also at the heart of a new strategy that the mosque is pursuing, one often at the centre of religious debate – the question of gender. Men's and women's spaces are customarily separated in mosques, with differences of opinion over the method and degree of



CritiqueCambridge Mosque



Left The female ablution space is octagonal and lit naturally.

Below The view from the atrium looking through the front facade glazed curtain walls to the garden and street. The interior and exterior are here used as spaces of gathering and socialising after Friday prayer.

Men and women use the same prayer hall, with a screen between them that can move

separation. In a handful of mosques in the UK women take up a gallery overlooking (albeit screened from) the larger male prayer space, but for the most part they find themselves in a completely separate room, smaller and generally poorer in comparison to the male. While acknowledging the benefits of a secure and dedicated space for women, critics also point out that this leads to many feeling unwelcome and excluded.

Cambridge Central Mosque has responded by aspiring to be the most inclusive women's mosque in the UK. All spaces are shared up to the point of entry to the prayer areas. But even here men and women both use the same prayer hall, with a screen between them that can move depending on the ratio of men and



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The building shifts the narrative of mosque architecture in Britain

women attending. The screen also ranges in height from a standing person, to waist high, to completely open, resulting in the possibility for women and men to pray in effectively the same space, probably a first for a mainstream UK mosque. This allows women who prefer separation to position themselves behind the screen, and for those who do seek further privacy, a first floor gallery is also provided.

The new Cambridge mosque is a bold endeavour to bring Muslim culture, experience and history into dialogue with wider British society. Indeed, Winter himself embodies these crossing of cultures; the son of eminent British modernist architect John Winter, he is a long standing and well-respected academic at Cambridge's Faculty of Divinity. After converting to Islam he took the name Abdul Hakim Murad, and has since earned credibility and respect across the Muslim community as an Islamic religious scholar, being identified as Britain's most influential Muslim in 2012.

Julia Barfield is resolute that this design could not have happened without Winter at the helm, while





Above The castellated parapet evokes historic Islamic architecture and symbolises the meeting of heaven and earth.

A dome symbolises the vault of heaven.

Left A mother and child outside the prayer hall.

Winter deflects attention by stating: 'The vision was altogether David's, and as the client we were struck by the quickness with which he understood the subtle atmospherics of Islamic spaces and the need for a meditative sobriety – and delivered this in a very unforced way in the context of a building that is still resolutely modern.' The new Cambridge mosque shifts the narrative of mosque architecture in Britain. Driven by an ambition of intercultural exchange and dialogue, it is the architecture of hope, and if it succeeds it may come to be seen as one of the most significant religious buildings in Britain of a generation.

Shahed Saleem teaches architecture at the University of Westminster and is the author of 'The British Mosque, an architectural and social history'



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Boomtime in Brum

A city-wide regeneration is righting some of the wrongs of the 1960s – can it recapture the optimism of that decade too?

Words: Isabelle Priest

Birmingham is being transformed. Visit with any regularity and each time you'll find something isn't where you thought it was, a new cluster of buildings has appeared, or an entire district has gone. Even locals have difficulties recognising where they are.

What's going on strikes hope and fear in the same measure. Hope because from an urban design perspective Birmingham has had a poor reputation for a long time. Fear that the scale of transformation could recreate similar problems to those that led to its poor reputation. I'm told that when the motor age was hailed in Birmingham in the '60s, for example, it made the place ridiculously excit-

ing. No one properly foresaw how what made a modern city with fast communications out of an old one could have so quickly become dated and inflexible, not to mention a financial noose around the local authority's neck with all the heavy infrastructure.

Today's regeneration is a lot about righting the wrongs; downgrading the ring road, dismantling the car tunnel network, roundabouts and subways, and demolishing the modernist buildings of the period – even those that people like and are of architectural merit such as John Madin's brutalist library. We've been here before surely?

Sixty years have passed, though, and

Birmingham's population is now pushing 1.1 million – and it's a young one

things have moved on; Birmingham's population is pushing more than 1.1 million for the first time since 1951. As I walk around with Gary Woodward, the council's city centre development planning manager, it seems the local authority is self-critical about how its approach to development and planning applications – it is not giving away its free-hold interest in sites to attract redevelopment as it did with Argent's Brindleyplace.

'Seeing the tower cranes in the city proves the success of our very clear strategy,' says Woodward.

We start our tour in the city gallery's Edwardian Tea Rooms where Woodward



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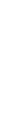
explains that Birmingham City Council is the largest local authority in Europe and its planning department staff number in the hundreds. It oversees the whole of Birmingham but it is really the centre that feels like a vast open construction site. The geography expands from the recently redone New Street Station to the ring road, encompassing 800 hectares. It includes the Jewellery Quarter, Ladywood Estate (announced recently as an area of major change), Broad Street Convention Centre area and Atwood Green, a 1960s estate regeneration by Crest Nicholson. It then swings round into Southside Quarter entertainment area, to Digbeth and Eastside, a relatively young district that includes Millennium Point, Birmingham City University's relocated campus and the future terminal for HS2. To the north is the Gun Quarter, a focus for new private student housing.

Three miles north of the city centre,

Above The former city centre wholesale market area of Birmingham, Smithfield, behind St Martin's Church and the Bullring in the foreground, is one of the largest redevelopment sites in single ownership in the UK. This £1.5 billion masterplan includes retail, residential (2,500 homes) and offices and is intended as a family leisure destination. The markets will become part of a new square. Upper Dean Street will be as car free as possible. A new pedestrian central spine will lead to further regeneration areas. Lendlease is the city council's preferred development partner.

Birmingham city centre feels like one vast, open construction site Perry Barr is being developed for the Commonwealth Games 2022 and an athlete's village for 6,800 people has just been approved with partner Lendlease. As with the London Olympics, it will be turned into housing afterwards (1,400 units). To the south of the city at Selly Oak, the University of Birmingham is establishing a £300m life sciences park for medical research: the local population is very diverse but very static, which is a bonus for medical studies. Another area in progress is the 190ha former Rover factory at Longbridge being developed by St Modwen.

Housing is obviously a priority. Another 150,000 people are expected to live in the city by 2031, requiring 89,000 homes. Only 45,000 of these will be accommodated on brownfield sites so the council has decided to release some of the last greenbelt land in its control to build 6,000 new homes at what it is calling the Langley Sustainable Urban



IRMINGHAM CITY COUNCIL



Buildings

Changing places

development, just outside Sutton Coldfield, and another plot nearby at Peddimore to facilitate an industrial site. Otherwise, the council is trying to meet demand by encouraging housebuilders to do things differently. It is teaming up with developers which have different ways of working. At Icknield Port Loop, for example, Urban Splash is bringing a dash of northern canalside living to 1,700 new homes in a formerly derelict 23ha area.

'Whereas previously housebuilders have tried to roll out the suburban boxes they do everywhere, we've pushed back,' says Woodward. 'We are looking for more innovative solutions: three-storey townhouses, roof terraces, apartments, higher densities, not just two-storey semis with a garage and drive.'

What has brought this change and drive about? For many years running Birmingham has topped the list as the home of the most new start-ups anywhere outside of London. Forty percent of the population is aged un $der\,25.\,A\,lot\,of\,young\,families\,and\,people\,are$ staying in when 25 years ago they might have moved out. There are also more work opportunities. Channel 4 may have chosen Leeds, but HSBC's headquarters is up and running

and Deutsche Bank is expanding. Many companies are gathering around HS2 too - engineering, planning and design businesses. Young people see a dynamic city that they can be agents in, and this helps it retain more students after graduation.

With a rapidly growing city and a lot of inward investment interest, the council has had to consider its own approach carefully. To recruit its own talent it set up a graduate scheme in 2015 that has seen 65 people pass through. This year planning and development was incorporated into a directorate named Inclusive Growth which includes transport, highways and property services and is about joined up, multiskilled thinking and placemaking. Part of that is using the enormous amounts of land the council owns to the benefit of everyone - like the Smithfield market area, Paradise and HS2 while trying to be more intelligent in paying for it in the face of cuts. After all, the council was only freed from four years of what was effectively special measures in March 2019.

The city's current strategy emerged from a series of policies since its 1987 Highbury Plan which was enacted to reverse se-

Retail Markets Market Square Right The Smithfield Leisure attractions site beyond St Martin's Festival Square Church from the Pedestrian boulevard Bullring has been Public transport routes cleared to make way

Residential neighbourhood

Left The 'big moves' for Birmingham's Smithfield masterplan.

for the £1.5 billion development.

We've pushed back against housebuilders trying to roll out suburban boxes

Left The Rea River Valley Urban Quarter is the

rich public realm to support health and wellbeing.

vere decline: 'That set to turn Birmingham from a car dominated city into a pedestrian one of streets and squares and spaces, bringing culture in and creating the new office districts around Brindleyplace, rejuvenating the canals, promoting the Bull Ring and New Street developments,' explains Woodward. 'By 1997 it needed a second act. Michael Parkinson from Liverpool John Moores University did a study that terminated in 2010 with the Big City Plan, a similar planning document that was enshrined in statute in 2017.'

The seven districts of transformation -New Street Station, Paradise, the old library, Snow Hill, around the children's hospital, Eastside including HS2 and Digbeth, then the southern gateway - were identified as



SIRMINGHAM CITY COUNCIL

The RIBA Journal July 2019



having the most potential for change, and the strategy set out how to deliver it as well. Each has its own masterplan for the big moves. This is used as a marketing document for attracting development partners. The planners also use a huge 3D model to drop any proposal models into context to test designs and the impact on surroundings, views and heights, which the council believes is unique for an authority in the UK. The visualisation room and VR goggles not only enable crosscity planning but can be used to engage different communities.

Towers are also always an area of concern. Although Birmingham hasn't seen the same number of applications for them as in Manchester, Woodward believes it will. Current policy encourages taller buildings on the city's natural ridge to emphasise the skyline, but they can be allowed elsewhere if the quality is high and has design features including crowns. Developers must also be able to justify a location. It's on that basis that several have been approved in Digbeth even though there are no precedents.

'There are some there we have said no to,' remembers Woodward. 'Likewise, if we think it is appropriate, we will request developers to go higher.'

This taps into Birmingham's Connected strategy that outlines a shift from car to sustainable transport, including a clean air zone which will take effect in January. It is also investing in segregated cycleways – one for Digbeth is being discussed but the north-south route is already partially complete. Dormant stations at Moseley and Kings Heath's may also reopen and the next stage of the tram extension will get to Centenary

Above On the former site of John Madin's library next to the town hall and museum, Paradise by Argent better connects the area outside the town hall (seen here) with Centenary Square beyond. Works are well under way, including new office buildings completed by Eric Parry Architects and Glenn Howells Architects. Chamberlain Square will open at the end of 2019, the ring road will be downgraded and one arm of the roundabout gone.

Below The new HS2 station sits in a development plan that links amenities and public transport up to Moor Street Station as well as Digbeth, which is rapidly turning into a creative district.

There's a shift from car to sustainable transport, and a clean air zone is coming

Square by the end of the year and to Edgbaston in 2022. The live Transport and Works Act plans to take it east to HS2 and beyond.

Yet the sum of this transformation must include caution about finance and quality. The council is trying to bring hundreds of pages of design guidance into one document and it has set up the Design and Conservation Review Panel. But some completed schemes, and the demolition of the Victorian St Luke's Church, are evidence of the specific issues it needs to address. Woodward assures me, however, that the starting point of any development is how to protect and improve Birmingham's range of identities.

'We decided to create a Design Guide because some of the developments that were being put forward didn't feel ambitious enough, were mediocre in terms of materials or didn't think about place quality and were a constant struggle for us in terms of planning control in that they didn't meet what we wanted,' he says. 'We want to retool ourselves by setting out a clear agenda about what our approach should be. Birmingham deserves better.' It does and it seems more positive than ever it will get that.



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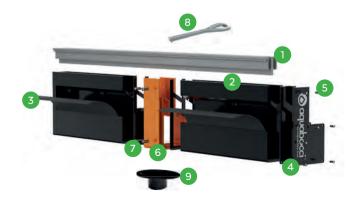






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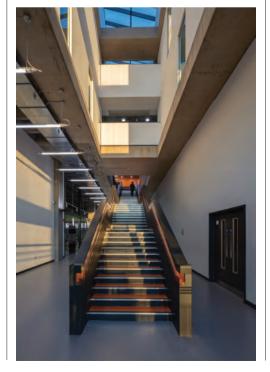
Rowan Parnell, director at Architecture Initiative, was travelling in a car driven by a project manager from Northampton County Council. 'We were driving past a large derelict building when he looked at me and said: "Do you reckon you could turn that into a school?"' Parnell recalls. 'I turned to him and said "Yes".' And so began Architecture Initiative's involvement with Northampton Academy.

That was five years ago. The large derelict building had originally been a Royal Mail sorting office, but had been unoccupied for almost 15 years. Built in the brutalist style in the late 1970s, its dark, concrete interior was uncompromisingly functional, made up of a 6m high ground floor where mail vans were loaded; a 6m high first floor where the mail was sorted and franked; and a 3m high top floor, which had housed the management offices and a canteen. But it was the abandoned building's location, on the perimeter of Northampton town centre, that made it interesting. It sat precisely where a new secondary school was required - hence the project manager's question.

Now, Architecture Initiative's scheme has turned the forsaken structure into an inspiring centre of learning for 2,220 pupils. The

Above Shiny and new: the facade of the new Northampton Academy

Below Punched through the old slabs to roof level, two giant circulation corridors run the length of the building.



building's mass remains largely unchanged, but a screen of perforated, polished metal now wraps around the front, concealing its brutalist lines and instead reflecting the academy's more sedate Victorian neighbours and a new entrance plaza.

It's an impressive transformation, one that has required some clever interventions. 'Originally the building was a big box 100m long and 60m wide, with very few windows,' says Parnell. 'The big issue was that there was no daylight entering the box and it was massively deep in plan, so if you were in the middle of the floor slab you could be 30m from an outside wall.'

Architecture Initiative's solution was to punch two rows of openings vertically down from the roof, through the second and first floor slabs to allow daylight to penetrate deep into the interior and down to the ground floor.

Two giant circulation corridors now run the length of the building, either side of the core teaching spaces. Above, the voids sliced through the in situ concrete waffle-slab floor plates and roof flood these linear arteries with daylight, encouraging their use as breakout learning spaces and social areas. Glass screens help maintain the visual links between these light wells and the double-height

BuildingsRefurbishment

learning spaces positioned in the heart of the building.

Work started on site in August 2016. After the building had been stripped back to its concrete structure, one of the first tasks was for a specialist concrete contractor to form the voids in its floor plates.

Before any of the openings could be cut, a forest of props had to be installed to support the floors from the concrete ground slab.

Starting on the second floor slab and working down through the building, the contractor cut out a series of 7m by 9m holes. It then chipped back the concrete from the edges of the new openings by about 1m to expose the floor's steel reinforcement. Lengths of new reinforcement were placed across the tops of the exposed rebar stubs and tied into place. Finally, the new assembly was encased in concrete to create an edge beam around each opening.

In addition, to maintain the integrity of the building's supporting structure, new beams have had to be installed across the void, spanning the space between its structural columns.

Architecture Initiative's next structural intervention was to insert a mezzanine floor around the perimeter of the double-height ground and first floors. 'To maximise the number of classrooms with access to natural light and ventilation, we inserted a mezzanine floor along three sides of the building's



Above Break out areas are tall, light and spacious.

IN NUMBERS

22,250m²

2.5 years construction time

£1501 cost per m²

£33.4m

Below Internal teaching spaces benefit from the slab cut-outs, bringing light into the depth of the building.

perimeter so that we could double-stack the classrooms,' explains Parnell.

The structure to support the mezzanine was formed by inserting steel beams between the outer wall and the first row of supporting columns. Unfortunately the 12.5m column spacing was not quite wide enough to accommodate a classroom in a single span, so the floor plate had to be extended 4m beyond the column to create the additional floor area and to form an access corridor. Rather than support the floor extension on additional columns, the projecting floor is suspended from the floor above.

A series of vertical windows cut into the perimeter walls allows light and fresh air into the perimeter classrooms. Most classrooms have three windows, one of which is fixed, one openable and one which features a louvred panel behind which is a ventilation unit. The windows are deliberately arranged so that they do not line up vertically in order to break up the uniformity of the huge facades. 'The randomisation of windows completely changed the feel of the building while ensuring the right level of daylight for the classrooms,' says Parnell.

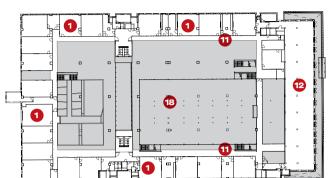
In addition to inserting the mezzanine levels, the only major structural addition is a new sports hall on the building's roof. 'The only bit of new build is on top because that was the only place we could put it,' reports Parnell.

A sunken courtyard on the roof was the perfect size to house the sports hall. However, the roof's supporting structure had very little additional load bearing. To help reduce the loading before the new structure was added, the roof's covering of concrete paving slabs was removed, along



WILLSCOTT

Second floor plan



1 Classrooms

sports hall.

- 2 External terrace
- 3 Changing rooms
- 4 Plantroom
- 5 Art spaces and gallery
- 6 Design and technology block
- 7 Dance and drama room
- 8 Theatre
- 9 Primary kitchen and hall
- 10 Primary library
- 11 Circulation corridors
- 12 Commercial unit
- 13 Science block
- 14 Library/open learning block
- 15 ICTrooms
- 16 Central break out space
- 17 Access to sports hall
- **18** Void

First floor plan



Credits
Client Northamptonshire
County Council
Architect Architecture

Structural and civil engineer MACE Main contractor Vinci Construction MEP Mott MacDonald Project management Turner & Townsend

Landscape architect
Architecture Initiative &
Plincke
Acoustic engineer Ion

Acoustics
Fire engineering
consultant JGA

with the upper layer of the concrete screed. The hall was then constructed using a light-weight structure of steel trusses mounted on steel columns.

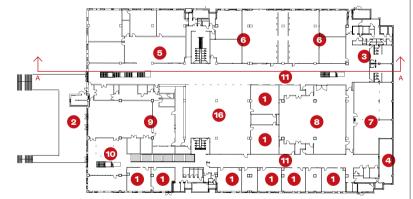
The modest additions of the new sports hall and mezzanine floors emphasise just how much of the existing structure Architecture Initiative's scheme has successfully incorporated into its design for the new school. 'One of the most sustainable things you can do is to reuse the structure,' comments Parnell.

Where appropriate, additional insulation has had to be added to the existing building to meet the thermal requirements of the building regulations. 'It's about choosing the best, most cost effective elements to upgrade,' says Parnell. 'For example, we knew that we had to replace the leaky roof so putting a lot of insulation up there before water proofing it was an easy decision.'

As much as possible, the existing finish of the original building has been respected and reused, with a clear distinction created between old and new. The existing waffle-slab structure remains exposed, as do the new building mechanical and electrical services, and its standardised 0.9m-centred modular grid is used as a basis to inform and set out the spatial arrangement of the entire school.

Five years on from his drive past the derelict structure Parnell is clearly pleased with the building's transformation: 'As someone who enjoys brutalist architecture its lovely to see the building has a new lease of life, because its previous life doing what it was designed to do was so short,' he says.

Basement floor plan



We inserted a mezzanine floor so we could double-stack the classrooms



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2: Intelligence



Hugh Pearman



Awarded an MBE last month in the Queen's birthday Honours list for services to architecture, our editor Hugh Pearman gives his view on UK architecture, education and the wider state of the profession

You received your MBE for services to architecture. Being an instigator of the Stirling Prize was one of them. How did the idea come about?

You've had over 40 years being a critic of UK architecture. What observations have you come away with?

You've been a visiting professor at the RCA and honorary vice-president at the AA. How do you rate the education here?

Editing the RIBA Journal for 13 years, what do you feel to be the state of the profession and the institute?

You've visited a lot of buildings in your career. Which building, or architect, stands out for you? I was Sunday Times architecture critic and a judge of a prize it sponsored for the Royal Fine Art Commission, and I was approached by the RIBA which wanted to up the profile of its own awards. I thought our money might be better spent as a prize for an annual best UK building award. It was a bit of a shower moment coming up with the 'Stirling Prize', after Jim and the idea of 'the best', but with the Stirling family's and Michael Wilford's support, and the approval of RIBA president Owen Luder, we ran with it.

When I started up, UK architecture seemed very parochial, but that had changed when Piano and Rogers won the Pompidou Centre competition and then, with Foster and Grimshaw, high-tech took off. Apart from Arts & Crafts, it's the only predominantly British movement. I like how pluralistic UK scene has become. Modernism still rules but there's that Caruso St John new ornamentalism and post-modernism's back

I'm not a regular teacher but I've been on a few crit panels. What interests me at the moment is less the conventional schools than the alternatives. So the London School of Architecture is trying to establish ways of learning through practice to avoid massive debt. The return of apprenticeships is encouraging too.

Big question! One concern is how new ways of procurement divest responsibility from the architect; another is how Architect A might do a design but Architect B carry it out. Both mean there's a loss of design ownership and that's deeply problematic. I'm encouraged by the recent Architects Declare initiative by former Stirling Prize winners – it's easy to criticise but it's great to have big hitters trying to be agents for change on the climate and biodiversity issue.

Maker turned architect Renzo Piano was my bellwether for the profession but that generation are now global superstars; I still think the Shard is a great skyscraper. I'm intrigued by smaller practices now and where they might take us: in Britain the likes of IF_DO, Gagarin Studio and Soda. As RIBAJ editor too I'm proud of what we do to nurture new talent, like our MacEwen Award and Rising Stars. The journal can be an agent of change itself. And unlike some awards they're free to enter!

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



Earn as you learn

More architecture schools now offer apprenticeship courses – here's what is available

Eleanor Young

In 2017 Foster and Partners and other larger practices found themselves facing the new apprenticeship levy, which affects all UK employers with annual salary bills of more than £3 million. The levy is 0.5% of that bill; Foster's alone pays about £250,000 into it each year. The government's aim is to bring education and the workplace closer together. Apprenticeships could widen access to architecture and get students fully qualified faster and with less debt. Only a handful of apprenticeship courses ran last year but gradually more schools of architecture are coming up with offerings.

Levy-paying practices can recoup it in apprenticeship training. Smaller firms can also access the training for a contribution of 5% of the fees, which is £1,050 for most courses. The apprentice themselves are not allowed to pay fees and are also employees, drawing a salary and released from their duties to study for 20% of their time.

When Foster's senior partner and head of human resources Charlotte Sword researched apprenticeships in other disciplines, there was plenty of advice that they were cheapest to write it off as a business expense. But Foster decided to invest, in the hope of increasing the diversity of the profession – and gaining ground in the battle for talent in the face of Brexit and a more insular labour market. Sword chaired the Architects Trailblazer group of architect-employers working with the ARB and the RIBA to set up the parameters for architectural apprenticeships but this



Foster's is very happy with its four apprentices and keen to recruit more next year

was just the start. She was aware of the need for architect-mentors in the office, provision for apprentice salaries, regular review meetings and internal support including logging time on intensive courses and study leave to allow resource planning.

Foster has had four apprentices in 2018/19. 'We are very happy with them,' says Sword. 'They are very productive.' The six Foster studios are keen to recruit more for next year and so the practice is approaching Part 1 students as well as advertising the vacancies. The apprentices have to be employed as well as satisfying the university entry level. 'The provision of courses is the limiting factor at the moment,' says Sword. Foster opted for intensive courses, rather than day release, and its apprentices study with Oxford Brookes. The practice has also been instrumental in encouraging other schools of architecture to look at apprenticeship courses.

Architectural apprenticeships are set at two levels. Level 6 is the same as an undergraduate degree and Part 1 and is currently only offered by London South Bank University. 'Level 6 is the real means to examine the issues of inclusivity and diversity,' say David

Above Students from the University of Bath are already applying their academic work in a live project context. Earlier this year one group prepared a masterplan for Split in Croatia and sent it to the city. Split's development agency then invited and paid for the group to visit and present the proposals to the public and the university.

Gloster, RIBA director of education. 'It allows the profession to make the choices of who will enter the profession, because it is about employment.'

There is a little more choice of courses at Level 7. This includes Parts 2 and 3 over three or four years of work and study, including a six-month period self study before an 'end point assessment'. The first batch of Level 7 courses offered were from London South Bank, Northumbria University, De Montfort University and Oxford Brookes. The slow wheels of academic processes are grinding towards more universities launching apprenticeships - although you won't find many on the approved list of the Institute for Apprenticeships and Technical Education, nor on the ARB's list of prescribed courses. That is another process again. The RIBA has taken a pragmatic approach, looking at different pathways through existing courses, as most apprenticeships are, thus not requiring an entirely new validation process.

James Campbell, incoming head of architecture at the University of Cambridge, has just announced an all-new apprenticeship course from 2020. He points out that such courses have obvious risks for the university as they are subject to government changes. But he urges other schools to establish their own architectural apprenticeships. Discussing why there is such a limited range of courses on offer, he says: 'I think it is short-sighted; apprenticeships are one of the obvious ways to architectural education, especially for those who want to go into practice. It is a really exciting alternative to full time.'

The chance to earn while studying and emerge without long term debt would be enough to sell the idea to many students. But there are other bonuses. 'The exciting thing is the relationship between tutor, practice mentor and student,' says Andrew Bourne of the University of the West of England. The process mandates four meetings a year between the three parties. 'As a traditional graduate you don't get that level of commitment from tutor and employer. This is a more mature way to challenge and support students.'

Will it be a second class architectural education? The word 'apprenticeships' has confused some people. Foster's Sword is at pains to reassure apprentices that they will come out with the same qualifications, as well as 'shed-loads of work experience'. Some worry that the immersion of the traditional studio

will be lost, but Oxford Brookes and a couple of new courses seem to recognise the importance of this intensity. And two of the most highly ranked schools in England, University of Bath and University of Cambridge, have got apprenticeships almost ready to launch. Interestingly, both are offering ones that depend on block release rather than day release.

Ensuring the structure works for both practices and apprentices is critical. At a time when there is an increased focused on mental health, expecting students to deal with the competing pressures of school and practice on a weekly basis seems set to create extra tensions. UWE's Bourne admits the hours are not spelt out where the course consists of two days a week during term time alongside practice. But the expectations have to be 'sensible'. 'The agreement between the three has to be respectful of what each party needs.' Block release - while allowing concentration on either study or work - has its own complexities, particularly for those studying at a distance; many Bath and Cambridge students are likely to be drawn from practices in the capital. For resource planning, however, it may be easier and reduce the competing demands of work and study. Certainly some of the schools - and Sword - feel that it will make for a better student experience and produce better work.

It allows the profession to make choices about who enters the profession, because it is about employment

Apprenticeship courses planned and ongoing

University	Average ranking*	Release	Available	Current approvals	
				IFATE	ARB
De Montfort University	30	DAY	NOW	Υ	LEVEL 7 (MArch + Part 3)
London South Bank University	41	DAY	NOW	Υ	LEVEL 6 (Not level 7)
University of Manchester and Manchester Metropolitan University*	12 =	DAY	2019		
Nottingham Trent University	23	DAY + ONLINE	2019		
Northumbria University**	18	DAY	NOW		LEVEL 7 (MArch only)
Oxford Brookes University	15	BLOCK	NOW	Υ	
Sheffield Hallam	52	TBC	TBC		
University of Bath	2 =	BLOCK	2020		
University of Cambridge	2 =	BLOCK	2020	Υ	
University of Nottingham	11	DAY + SHORT BLOCK	2019		
University of Portsmouth	31	DAY	2019	Υ	
University of the West of England	12 =	DAY	2019		

^{*}Average rankings for subject drawn from Complete University Guide, Guardian and Times Good University Guide
**In discussion about offering RIBA Part 3 course as part of Level 7

NB: list drawn from numerous sources including ARB,RIBA, IFATE and the universities and may not be definitive

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HOMAS LOWE, YEE WEIGAN, YUCHEN MEI, STEPHEN OLDHAM, HUGH PEARCE, SAM BUNN

University of Bath

Bath was keen

to establish an

apprenticeship

equivalent to the

learning experience

of full time students

STRUCTURE AND COLLABORATION

Since the architecture courses began at the University of Bath in 1966 they have integrated academic learning with periods in practice: in second, third and fifth years students spend one of the two annual semesters in practice, with visible cross fertilisation between school and practice. So the structure lends itself to apprenticeships.

It means the school already has an infrastructure for staff visiting students in practice – there are relationships with 300 practices with typically 250 students placed each year. This dovetails with the way apprenticeships are being offered at Parts 2 and 3.

Head of architecture Alex Wright says: 'Practices who have students on placements typically know they want such students to be part of their practice long term.' Part 1 students are also experienced with that format, and of employer and school collaborating on their learning.

'We didn't want two different pathways, one with day release,' says Wright. 'Central to Bath's pedagogy is studio-based learning and we were keen to establish an apprenticeship equivalent to the learning experience our full time students get.' He also believes it will give apprentices a better chance at producing equally high quality studio projects for their portfolios than the day release model could.

This format demands academic time in 14-week blocks from students and their employers. Full time students get three academic semesters over two years, apprentices will do the same modules taught in the same way but over three years. It will be followed up by a part time Part 3.

Neatly, for the flexibility of both students and school, this structure means any spaces on the MArch can be taken up by either full timers or apprentices. It will be launched in autumn 2020 when all the approvals, including ARB's, should hopefully be lined up.

Alex Wright, a.w.wright@bath.ac.uk

University of the West of England

BUILDING ON A PART TIME COURSE

The University of the West of England is building on its existing part time masters programme. During term apprentices will have two university days of contact time and studying a week. They will be taught in the same studios as part and full timers but take modules at different speeds over three years. The heaviest year, in credits and likely workload, is the second year.

UWE launched its Level 7 apprenticeship in April with a group of Bristol and Bath practices. 'We have around 500 practices within commuting distance,' says Andrew Bourne, associate head of department at UWE. Conversations continue with practices in Taunton, Exeter and Gloucester. The university's traditional commuting ground of Wales is out of the picture for apprenticeships because of different funding arrangements.

UWE still has to jump through the hoops. Even with the support of a special university apprenticeship hub, Bourne is aware that a tripartite agreement, the conversations that go with it and the extra paperwork, are likely to slow things down a little. Early September is the cut off for applying for studying this year.

degreeapprenticeships@uwe.ac.uk

University of Cambridge

MASTERCLASSES

Apprentices at the University of Cambridge will become part of Queens' College. But that is it for tradition, the course is new.

It will be taught as short residential courses, mostly two weeks long, in the university vacations. The plan is to pull in industry expertise with masterclasses on areas such as housing, urban design, computing and modelling. Throughout the emphasis is on team work and mirroring real world practice.

'The masterclass is a different kind of project,' says James Campbell, incoming head of architecture at Cambridge. 'Think about practice, how often do you spend more than two weeks on a concept?' The third year is a little more independent with the thesis project — which will give students the chance for their own studio work. Then follows 25 days over six months of self study and the end point assessment.

Campbell knows Cambridge has to work harder than other universities to prove it is affordable and hopes to get administrators to write off materials costs, including those of portfolios.

Apprentices will get a Master of Studies, as the university doesn't currently have an MArch. The minimum number for the course is 20 and the current plan is for no more than 30, to ensure a successful masterclass. The university is on the lookout for a director for the course, which will run from autumn 2020.

apprenticeships@ice.cam.ac.uk



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ARRISON LOWTH

London South Bank University

UNDERGRADUATE AND POSTGRADUATE

London South Bank University is the first – and only – provider to offer both undergraduate and postgraduate apprenticeships, building on its commitment to vocational education. Level 6 and level 7 are based on existing part time course and apprentices will work with full and part time students. Attendance is a regular day a week at university during the semesters. Apprentices on both levels concentrate on design modules one year with lecture-based modules the following year.

Level 6: www.lsbu.ac.uk/courses/course-finder/ architectural-assistant-apprenticeship-ba Level 7: www.lsbu.ac.uk/courses/course-finder/ architect-apprenticeship-march

University of Nottingham

PRACTICE COLLABORATION

The Nottingham University course is mapped onto the Part 2 MArch Collaborative Practice Research programme that has a specialism in practice-based research, and onto the existing Part 3. Both content and delivery are tried and tested for students who are mixing study and work.

However, it is delivered over a longer time frame. The 'Part 2' is three days practice/two days academic study over a week, a split that is intended to allow a meaningful contribution to the employing practice and ensure sufficient time to engage with the academic content.

Typically it is delivered in weekly one-day teaching blocks with a further day protected to reflect on content, develop understanding and tackle assessments.

Sessions are run from two centres, one at Nottingham University and one in London. The 'Part 3' component makes use of two or three day recall sessions where focused content is delivered in support of a passed set of reflective assessments. Regular group workshops allow students to exchange experiences and receive support.

Graeme Barker, Graeme.Barker@nottingham.ac.uk

Northumbria University

LIVE AND VIRTUAL

The apprenticeship at Northumbria University is a route through the full time MArch and shares non-design modules. The design projects are live to reflect the practical focus of the course. Northumbria's Paul Jones, professor architectural scholarship, says: 'We work with public sector organisations and charities and as a programme we are committed to building the student design projects where possible. In the first years of the apprenticeship we have worked with Gateshead Council on a housing project... our work has informed their approach to the site and received high praise from the executive. Other students have used live projects in their office; these have included heritage projects and visitor centres.'

The apprentices attend on day release. The course is being offered with virtual tutorials and filmed lectures beyond the North East, so university attendance is only required twice a semester for reviews. 'We have piloted this approach this year,' says Jones, 'and it worked well. The students who weren't from the region were very appreciative of the approach. In September we have students starting the apprenticeship who are working in London, Cambridge, Nottingham, the Lake District, and Yorkshire; all doing the apprenticeship at Northumbria.' www.northumbria.ac.uk/study-at-northumbria/courses/master-of-architecture-degree-apprenticeship-dtpara1/

Above The University of Northumbria's apprenticeship course focuses on live projects. In the first year students worked with Gateshead Council on a housing project for wellbeing, Brandling Eco Village. Their efforts won high praise from the council.

More details

Government apprenticeship information: https://findapprenticeshiptraining.apprenticeships.education.gov.uk

ARB Qualification search tool at arb.org.uk and filter for apprenticeship, to check for qualifications as they are prescribed.

RIBA guidance www.architecture.com/apprenticeships

The RIBA Journal July 2019



The window for maximum demands.

An innovative aluminium window: maximum design creates a harmonious appearance; maximum transparency provides more light and comfort; and maximum sustainability helps protect the climate – a window for the city of the future.

The window handle is hidden in the sash, adding to the harmonious appearance of the window. This innovative design idea was awarded a prize from the international expert juries at both the **iF DESIGN AWARD 2018** and the **Red Dot Design Award 2018**.







It's creative up north

Aberdeen's Scott Sutherland School sees distinct advantages in being so distant from London

Words: Eleanor Young

Below With his part II project, Stenness Archaeology Visitor Centre, student Dale Leith aimed to nurture the seasonal fragility of the island community and set up a place of cultural exchange between visitors and residents. Dale Leith Scott Sutherland School for unit 3, An Orcadian Caravanserai.



DALE LEITH, SCOTT (2)

Aberdeen's Scott Sutherland School of Architecture and the Built Environment is the northernmost of the UK's architecture schools. It takes pride in its position; head of school David McClean recently wrote on 'critical north' - a way of using the distance to enable an independent view with space to carve out its own ideas. Its three MArch units - each with external visiting professors including Neil Gillespie of Reiach and Hall play a strong part in this and in investigating Aberdeen itself, driven by oil and agricultural wealth, as well as going north to Orkney.

Aberdeen is 130 miles from Edinburgh and 145 from Glasgow but McClean says students more often choose between London schools and Scott Sutherland. The financial landscapes of Scotland and England are thousands of pounds apart. But the gap could be set to close a little. McClean has to deliver courses for £6,530 per student while in Eng-

At the Big Crit, conversation is more relaxed

Below The student hub at the Sir Ian Wood Building, designed by BDP and home to the Scott Sutherland School



land the Augar Review on Post 18 Education and Funding recently recommended that funding be reduced to £7,500 a year.

So where are the students from? Part I students are 80% Scottish, mostly from the Central Belt and Grampians. There is a top up of European students but very few come from England. However, the school is an exporter of graduates and has acknowledged this recently with a show in London. This year Stromness on Orkney will also host a show.

The university is outside Aberdeen city centre, in Garthdee. Four years ago it moved into the slightly bombastic Sir Ian Wood Building, full of curves and atriums with a complicated plan of unexpected angles and levels (visitors are handed a plan for navigation on arrival). The architecture school has one wing and as you step into it the finishes drop away and the studios start to assert themselves with students' work.

From the school, the campus's amazing position, perched above the River Dee, can be understood. Overlooking the river are the south-facing BDP designed studios – hard working spaces given life by the clutter of design and model making.

McClean's PhD, completed in 2009, was on the practice of studio teaching and he fought not to lose space in the move to the new building. 'Studio culture was almost unquestioned,' he says. 'We kept on doing it, but how do we know what's effective?' Now the method and practice of teaching, the pedagogy, is subject to wider investigation. Mc-Clean believes studio teaching fundamentally works, but says his studies revealed gaps. Now the school employs someone to enhance learning across the subjects McClean oversees - surveying, construction and architectural technology as well as architecture. Informal processes of working side by side, and specially constructed projects, have brought them together.

Back in architecture there has been an underlying focus on reviews. 'We have worked hard to get better reviews,' he says. 'Twenty years ago crits became very disrespectful... A brutal crit – which we have all experienced – might be about developing a thick skin. But it is a questionable method.' At the school the focus on the work, rather than the student, has been reinforced, and some years ago they started to set out the ground rules for visiting critics. It continues to be a valuable process: 'Reviewers can be incisive, pointing out the deepest flaws in the project, without affecting the mental health

of the student.' The school keeps trying things, such as different layouts, to avoid the crit reverting to type. One of the big successes, McClean believes, has been the Big Crit, which is set outside the assessment process. 'Conversation becomes more relaxed, it becomes a dialogue,' he says.

McClean is looking at how the curriculum can develop student resilience and has been researching the mental health of architecture students. The discipline has 25% of students reporting mental health problems – higher than any other. He hopes it will lead to a bigger research project on this in the future and initial survey results from schools across the UK suggest there is an appetite for it.

Investment by the school into an online course for construction management has thrown light on communications more generally. Students expect a huge amount online even with some face to face courses. Mc-Clean has seen clearer teaching processes, progression and ownership of learning as a result. Students highlighted these elements, particularly marking and its subjectivity, as confusing at the RIBA visiting board in 2018. But for now the school is enjoying its unique position: with reports of a close knit group of students who 'live in the studio' and bring architects from the south, and north, to the school to speak through an active student society - appropriately named for the school's latitude and longitude, 57°10′.

Below Projection space at Leith's Stenness Archaeology Visitor Centre.



The focus on the work, rather than the student, has been reinforced

AN ORCADIAN CARAVANSERAI

Reiach and Hall's Neil Gillespie is one of a small number of leading practitioners who also commits himself to regular studio teaching. 'It is really useful for practice,' he says. 'It is nice to have a part of your life that no one else knows about. I can bring enthusiasms back to the office. After a good review you see your own work in a different light; and see the need to challenge yourself. In many ways it's the one place where you can still have a conversation about architecture.'

He travels over from Edinburgh once a week to run one of the three MArch units, An Orcadian Caravanserai. The units include both fourth and fifth year students, 'a relay race' is how Gillespie describes them. In the first few years his unit looked to the periphery of Aberdeen, as other units are now doing. But then his unit turned its attention north to the Orkneys, to themes of light and landscape and a place Gillespie knew well from building there. It also explores larger themes of the periphery and marginal groups – for example the impact of the arrival of 5000 cruise liner passengers on Kirkwall's population of 20,000. Using Florian Beigel's favoured condenser of the caravanserai – where groups can meet – students have tried to draw together residents and visitors.

'I am primarily interested in getting close to intimate concerns — the space, material and light,' says Gillespie. 'Inevitably you never get as far as you hope you might — you can only take things so far in school, you need a team, friends, engineers...'

MFTRICS

Number of Part 1 and Part 2 full-time equivalent students in the current academic year

147 (Part 1) 63 (Part 2)

Floor area 810m² architectural design studios (3.9m²/ student in part 1 and 2)

Tutors per undergrad student: 1:14

Tutors per MArch: 1:10 Studio opening times: Weekdays 07:00 - 23:00 Weekend 09:00 - 21:00

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How to solve the housing crisis

Our response to the housing shortage is broken; its effects deeply damaging. We need a different system built on different values

Philip Graham

Architects have been complicit in the UK's policy to boost new supply. This is despite the fact that an unimaginable level of housebuilding would be required to sate the unbounded investment demand for UK housing.

The architectural profession itself identifies most new homes as being too small to meet the needs of the people who buy them. This increases housing space inequality, and so undoes one of the defining achievements of the 20th century. Younger households must choose between the social costs of overcrowding or the capital costs of moving.

While the market serves most households well, it is highly restrictive for younger ones, particularly dual-career households who are often tied to large but unaffordable metropolitan areas. The average age of entering home ownership has risen to 33, according to MHCLG figures, and the short-term space requirements of this group are more likely to change over a relatively predictable lifecycle. This makes overcrowding more likely, affecting mental health, wellbeing, basic lifestyle needs, educational outcomes, childhood attainment and future socio-economic status.

In a well-functioning housing market, this mismatch might not matter because economists expect homeowners to move short distances when their needs change. But



the time available to accumulate the home equity required to trade-up will limit the options for younger households.

The costs of trading up include stamp duty which encourages expanding households to tolerate small spaces for longer and shrinking households to remain in large houses. This misallocation of space is reinforced by the failure to reform council tax, further reducing the return flow of housing stock. This has only added to affordability constraints in market conditions to which younger households are most exposed.

These examples show how regressive and inefficient institutional systems – rather than a shortage of homes per se – have led to space inequality and its consequences for welfare. These can include a 'snakes and ladders' pathway of house moves and tenure switches which may account for some of the 26% of households returning to private rental from owner-occupied housing. House moves are known to be worst for children and the elderly and the more frequent can increase the risks to younger children of developing behavioural issues in later childhood.

Architects could excuse themselves from being the authors of these welfare costs. After all, the profession has lost influence to speculative house builders for whom spatial quality is determined by corporate interest and market knowledge. Indeed, in our tenure-divided

Above New affordable housing in Walthamstow for Pocket Living by Gort Scott Architects.

society, the supply of compact housing could be considered a reasonable market response to meet a narrowing seam of demand.

Demand is now so constrained that 60% of renting households in the south east and 30% in the north east would have to spend more than 30% of their income on housing in order to buy a home. However, using the market as an excuse ignores the centrality of our institutional system in manufacturing housing demand. It also ignores the corrosive effects of the current policy project to expand new housing supply on the value of design. As a result, architects have lost the authority to leverage value from design services.

This loss of influence has reduced the design process from one of unique professional skill and knowledge to a goal-based system of procedures, designed to self-regulate risk. The retreat to risk-management over design value includes the mitigation of planning, compliance and viability risk, as derived from a residual land value.

Two misunderstandings lie behind architects' loss of influence. We have blindly accepted a singular economic interpretation of the UK housing situation; and secondly, we have failed to engage with the market risks

Using the market as an excuse ignores the centrality of our institutional system in manufacturing housing demand

that generate so much of the real cost of a home.

By engaging with other disciplines, architects could address these two failures and regain some of their influence over the design of good homes. Economists, for example, recognise that there are in fact three interpretations of the UK's housing situation.

The first view is that high house prices relative to other prices can be explained by insufficient house building, alongside strong demand growth. It follows from this position that a deregulated planning environment is required to unleash new housing supply – typically led by the private sector.

The second view is that the current institutional system of fiscal and monetary policy has skewed housing distribution to the advantage of existing homeowners and older generations. It follows from this that despite historical precedent, a suite of tax reforms would level the intergenerational playing field.

The third view states that the current housing market is in fact a commodity market in which price is the dominant criteria that connects buyers with sellers. This has the effect that uncertain demand is the primary risk to speculative developers who add a premium to development finance which creates an unnecessary barrier to viability. It follows from this view that a new, 'matching market' mechanism for exchange is required, through which agents could be paired with someone or something.

Of these three interpretations, the expansion of the existing housing stock called for by many economists – and broadly facilitated by architects – has had most traction with policymakers to whom its deregulatory agenda appeals. In practice however, the expansion of new supply would have to be substantial and sustained to noticeably affect affordability.

Meanwhile, holistic thinking about alternative housing tax and tenure policies has been woefully absent in the UK government.



There is therefore an opportunity for the architectural profession to expose the effects of the current institutional system on housing outcomes, while promoting alternatives and steering policy towards institutional reform.

A new style of home occupation could change the relationship households have with risk and reward, improving affordability by reducing the price volatility associated with both developing land and owning a home. Equity finance and new experiments in matching markets, such as Nightingale Housing in Melbourne, offer solutions that could provide stability and resilience as standard.

Such resilience could be achieved by combining membership (rather than ownership); deliberative design (rather than speculative design); and new ways of organising shared and private spaces in multi-dwelling housing (for example cohousing). This could dissolve the binary distinction between owners and renters to make housing a civilising part of the 'ordinary economy', rather than a complex, credit-based instrument, and make moving home a choice rather than a circumstance. •

Philip Graham is an architect, partner and researcher at Cullinan Studio. He was an RIBA Journal Rising Star in 2016 Above Equity sharing could make design value central to multi-dwelling housing by bringing together three 'patient' actors (patient landowners, invested households and impact lenders) and three exchange environments ('deliberative' design, a matching market and membership) to dissolve the boundary between traditional home ownership and rental.

FURTHER READING

While this article is drawn from 35 separate pieces of research, most are journal articles and difficult to source. However, the following recommended texts are online or in bookshops:

- Jackson, Ben (2012) Property Owning Democracy:
 A brief history (in T Williamson (ed), Property-Owning Democracy: Rawls and Beyond, Wiley-Blackwell)
- Meen, G (2018) How should housing affordability be measured? (University of Reading for the Centre for Collaborative Housing Evidence)
- Muellbauer, J (July 2018) Housing, debt and the economy: A tale of two countries (University of Oxford Department of Economics, Discussion Paper 855)
- Ryan-Collins, Lloyd and Macfarlane (2017) Rethinking the Economics of Land and Housing (The New Economics Foundation)

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SterlingOSB Zero plays its part in creating mini-business hub

The first of three articles in this season's Norbord User Guide shows how SterlingOSB Zero helped build north London's award winning Blue House Yard

A gleaming blue renovated council office and a row of vividly painted 'micro-sheds' brighten up the site of a disused car park in a £210,000 scheme to support small businesses in Wood Green, north London.

The temporary Blue House Yard, designed by Jan Kattein Architects and commended in RIBAJ's MacEwen Award 2018, will inject life into the neighbourhood over the next five years as a precursor to Haringey Council's wider area regeneration.

The studio worked with social enterprise Meanwhile Space CIC to provide new accommodation for small businesses, which make up 90% of the local economy yet face rising rents and a lack of suitable workspace.

The office at the corner of the plot was converted (and painted blue) to provide 11 studios for creative businesses. New buildings include nine two-storey timber 'micro-shed' workspaces that face onto a new public square; a café in a retired double-decker bus and a minicab office.

An imperative to provide robust and attractive spaces at minimal cost informed the decision to specify SterlingOSB Zero as an internal lining for the walls and ceilings of the micro-sheds.

The exposed panels provide structural stability to the timber frame and 'give young businesses a space that looks finished and ready to move into in a rough and ready sort of way,' says Gabriel Warshafsky, director of projects at Jan Kattein Architects. Tenants





Above Room with a view: SterlingOSB Zero's inner lining helps frame Jan Kattein Architects' Blue House Yard.

Below The temporary development in full swing.

may paint the walls, but most have chosen not to.

The workspaces were delivered as a self-build project and the architect became its own contractor employing three full time carpenters and eight apprentices in partnership with a local college, and trained a Part I architecture student as site manager.

The SterlingOSB Zero panels were considered light and manoeuvreable and easy to lift and fix into timber studs. The team worked with standard panels that required minimal cutting to fit the simple orthogonal spaces. Screw heads left flush with the surface enhanced the urban aesthetic.

'Being quite involved on site we were very conscious of the buildability of what we

were proposing and SterlingOSB Zero fitted perfectly,' says Warshafsky. 'It's a fairly straightforward material to work with and did not require any fancy details; we didn't get into complicated wall build ups.'

In terms of technical considerations, fire performance was not applicable, as the small size of the sheds fall below the threshold for Building Regulations.

Investigations by the architect showed that SterlingOSB Zero was more sustainable than plywood, which typically contains higher levels of formaldehyde and can also contain hardwoods, or tropical hardwoods.

Although there are no plans to move the buildings to a different site at the end of the five years, the large panels could be dismantled and reused elsewhere. 'The material was a very logical and intuitive choice that perfectly matched the spirit and ambitions of the project,' Warshafsky concludes. •

norbord.co.uk

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Box in a box helps keep sound in its place

Below BPN Architects' perspective section clearly illustrates the structural nature of The Box.

Without weather constraints, SterlingOSB Zero proved just the job for a sound-proofed, cool-looking music venue in Coventry



'We like SterlingOSB Zero as a material; it's a bit raw and edgy, and it's really easy to detail and use which is why it was chosen for this project,' says Larry Priest, a partner at BPN Architects. He's talking about The Box, a new multi-purpose arts and music venue recently opened in Coventry, where SterlingOSB Zero provides the finish for the walls and ceiling of the performance space, foyer and the mezzanine floor. It even features in the meeting room and breakout spaces.

The Box is at FarGo Village, a former industrial estate adjacent to the city's Medieval quarter, which has been transformed into a creative hub as part of the area's regeneration. The Box is the latest building on the site to get a BPN makeover: 'In the past five years we've converted a number of the old 60s buildings into studios, workshops and business start-up premises for developer Complex Development Projects, the company regenerating the site,' says Priest.

Surprisingly, the new venue is hidden in an almost windowless portal-framed industrial shed that started life as a carpet warehouse. Under the first phase of the estate's metamorphosis the vacant warehouse was used as a gallery. 'There was not enough money to create The Box at the

SterlingOSB Zero is sustainable, decorative, has a low surface spread of flame and worked acoustically

Below A sense of the scale of the completed installation in the main Box space.



start of the site's regeneration so it had an initial phase as a gallery,' explains Priest. 'Its transformation into a music venue is under a second phase of works.'

The venue's concealed location within an existing building did restrict its size. But it also gave BPN aesthetic freedom without needing to worry about the weather. 'The design is based on what we could fit within the existing envelope of the former warehouse, but because it is inside this existing shell there were no aesthetic constraints and no need to worry about weatherproofing – we could do what we wanted within the limited budget,' Priest explains.

What the architect has slotted into the old carpet warehouse is a 500-person capacity multi-purpose performance venue, a large entrance foyer with a mezzanine level above and a meeting room and breakout space. In addition, there are all the support spaces necessary for a performing arts venue including changing rooms, toilets, stores and a plant room.

Externally, to add an element of fun to the building's retail-park aesthetic, the architect has punched three sections of shipping container through the facade above the entrance. Internally, SterlingOSB



Zero gives the venue its character.

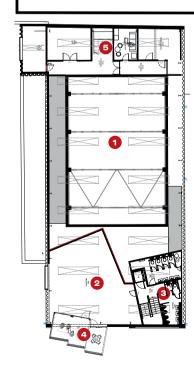
'SterlingOSB Zero is an engineered wood that gives the interior a really nice orange quality; it's sustainable, decorative, has a low surface spread of flame and worked acoustically,' says Priest.

The venue is close to a residential area so minimising noise-breakout from the performance space is critical. Its name – The Box – gives a hint as to how this has been achieved: it has been built, literally, as a box within a box. 'There are no proprietary acoustic systems used because the venue has been constructed on a tight budget; instead the key acoustic principle is to isolate the performance box from the portal frame enclosure to minimise noise breakout,' says Adam Mottershead, acoustic advisor to FarGo Village.

The use of SterlingOSB Zero is also key to containing noise within the venue. A lightweight steel structure supports the walls and ceiling of the inner box. In order to add as much mass as possible and provide acoustic discontinuity the team devised what Mottershead calls a 'SterlingOSB Zero sandwich'. This comprises an 18mm thick outer layer of SterlingOSB Zero, a 15mm thick plasterboard filling and an 18mm inner skin of SterlingOSB Zero.

Above Container and SterlingOSB Zero come together in a simple interface.

- 1 The Box
- 2 Foyer
- 3 Circulation and toilets
- 4 Container meeting rooms
- 5 Backstage areas



Above Floor plan



'When sounds travel through a panel made using materials with different properties you get a better level of acoustic damping — so the SterlingOSB Zero sandwich is a cost effective way to squeeze as much acoustic performance as possible out of the construction of both the ceiling and walls,' Mottershead explains.

An added bonus of using SterlingOSB Zero as both the inner and outer surface of walls and ceiling is that it means almost every surface can now be used as a patress onto which objects or artwork can be attached. 'All these aspects, together with its visual appeal, mean it provides a really dynamic solution,' says Mottershead.

Priest says that the SterlingOSB Zero solution was very much a collaborative effort between the architect, design team and contractor with nobody being too precious. 'It was a nice job to work on; we did things slightly differently and created a special place,' he concludes. •

Top Looking from the breakout space to the container meeting rooms.

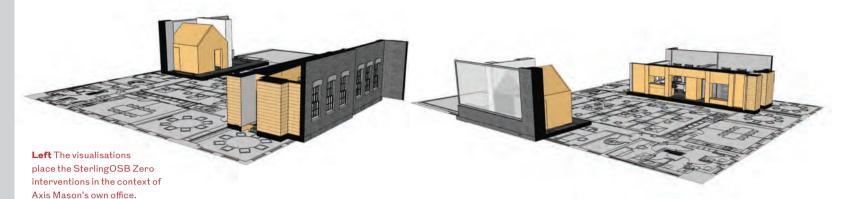
Below Shipping containers punched through the facade enliven the street.



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How to make the office interesting

SterlingOSB Zero's edgy urban aesthetic ticked all the boxes for an architect's office refit



When architecture and interior design firm Axis Mason decided to overhaul the interior of its new office at Saint Helier in Jersey, it didn't know the $450m^2$ project would become a statement of intent for the firm's design philosophy and a showcase for clients.

'We have a very broad client base, ranging from wealthy corporate businesses to individuals who enjoy good design but don't necessarily have the money to spend on expensive product,' says Siobhann Macleod, an associate and interior designer at Axis Mason, who led the Somerville House project. 'The interiors had to demonstrate a diversity of humble materials, with moments of beauty and extravagance.'

SterlingOSB Zero was identified early on as an ideal material for the job due to its strong identity and 'edgy' urban aesthetic. Where particle board is often seen as a rough, sacrificial material, used for temporary structures, the intention here was to create robust permanent features with crisp lines and quality details.

Applications for the product include a standalone pod built entirely in SterlingOSB Zero and incorporating a server room and



disabled toilet, a full height 'inhabited wall' with integrated seating and a reception desk, and other flooring, cladding and joinery.

The office's first floor location and restricted access meant joinery would mostly have to be carried out on site, and Norbord's product exhibited ideal handling and behavioural characteristics.

The joinery contractor, Mitchell Building Contractors, developed one-to-one mock ups of common details, such as horizontal connections and exposed corner joints, and Axis Mason selected the most aesthetically pleasing and practical for machining on site.

'We were looking for crisp, clean cut junctions, mitred or butt jointed,' says Macleod. 'We let the material dictate how it needed to be detailed, rather than try to force it into a situation where it was not going to perform well.'

The surface of the inhabited wall had to be divided into a series of wide horizontal bands, due to its scale. Simple butt joints between the boards would not have provided adequate stability, so the horizontal edges were instead routed to create grooved rebates at the junctions.

Another detail was developed to create ventilation grills in the inhabited wall by routing slots into the boards as an alternative to metal grills.

The Building Regulations requirement to prevent the surface spread of flame raised

Left Inside the 'inhabited wall' looking out to the office with the standalone pod in the background.

Right The new wall complements the office's minimalist industrial aesthetic.

a point of contention. Macleod wasn't keen on the colour of SterlingOSB Zero products impregnated with fire retardants, but surface fireproofing treatments were also problematic. 'We had lots of advice from paint, stain and fire retardant manufacturers and most products react poorly with the adhesive that bonds particles in the boards together – it can cause peeling and flaking in some boards,' she says.

After various physical tests a suitable product was found, but its toxicity required the site to be cleared of people, and operatives to wear protective suits and masks.

This was mitigated by SterlingOSB Zero's sustainable credentials: wood is high in sequestered carbon and using a material that is often seen as temporary in permanent applications highlighted a more environmentally beneficial use for it.

SterlingOSB Zero became the dominant material in the refurb that was 'used in the most interesting and unusual way' that continues to spark lively conversations with prospective clients and other visitors.



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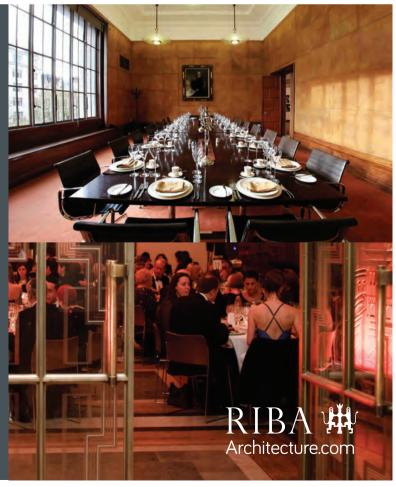


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3: Culture

How green is your garden?

While we sensibly seal our homes, don't forget to supply habitats for our wildlife



Hugh Pearman Editor

We aren't using the lawnmower nearly as much as we used to. Our 1890s inner-suburb garden has a small lawn, originally circular but which in the way of lawns has dissolved at the perimeter as other things creep in. Nonetheless we took pride – inherited from our respective parents, World War Two generation, stern believers in the weekly mow – in maintaining this patch of semi-manicured greenness, for years. Mowing, weeding, feeding, aerating, moss-raking. Until this year.

This year, we look out the back of the house and, where previously we might have told each other that the lawn needed some attention, now we choose to see a delightful bee-friendly wildflower meadow. We could do it properly I suppose, scratch it up, sow a meadow mix, but it seems to be doing well enough on its own, gradually. And since plants are mobile, they are moving in from the edges, popping up in the middle. Most of the flowering plants are of the simple perennial variety that attract the pollinating insects. Some bees live in the ground.

A landlocked row of such terraced-street

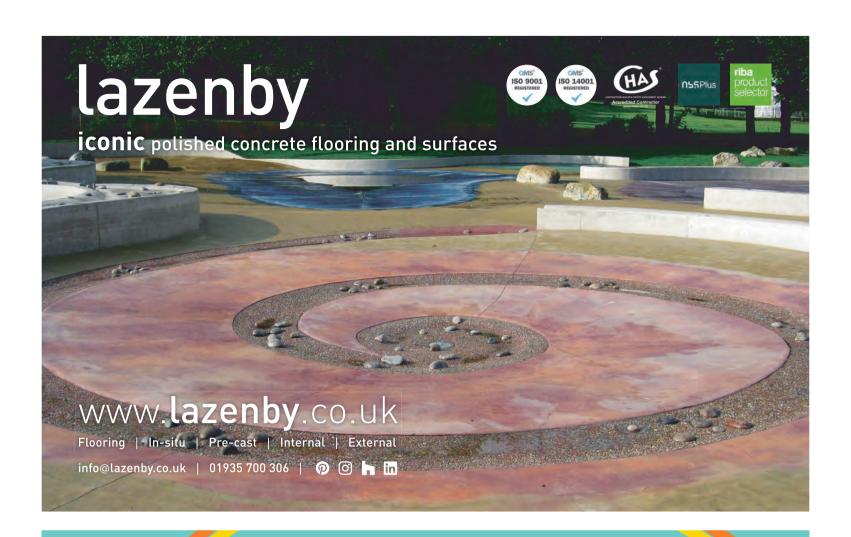
I look and listen out for the arrival of swifts every May an indicator of the presence of a food chain in action city gardens as ours — even allowing for the occasional outbreak of astroturfed "outdoor rooms" garden studios and full concrete jacket that some go in for — is likely to be a richer haven of wildlife now than many an equivalent area of farmed countryside. Arable farms, due to decades of postwar chemical treatments and hedgerow removal, are increasingly sterile though a wildlife-habitat fightback is now taking place.

I look and listen out for the arrival of swifts every May - an indicator of the presence of a food chain in action. But every year there are fewer swifts: this year very few. Partly there's less food to sustain them on their long-distance migrations as global insect numbers decline, partly it's loss of nesting habitat. Here you get a conflict between the twin desires to combat climate change (or just spend less on fuel) and protect biodiversity: well-insulated, more airtight houses tend to lack the holes and crevices that flying creatures need to roost and nest. Meanwhile, the loss of wildlife habitats in front gardens to parking spaces (hastened by the rise of Controlled Parking Zones, themselves partly a measure to curb unnecessary car-commuting, hence toxic emissions) will only accelerate further as more and more people install electric car chargers. And so we see the law of unintended consequences in action.

This issue Will Wiles suggests that old post-war planning phenomenon of SLOAP can be literally fertile ground for new wild-life habitats – basically by treating it as we now treat our 'lawn'. We also carry an update on Architects Declare, the Stirling Prize winners' action plan to tackle both climate change and biodiversity loss. It's worth remembering that while these are two sides of the same Anthropocene coin, ill-considered fixes for the former can make the latter worse. Allow for much more planting please, make your ground surfaces absorbent and your buildings bird and bat friendly, and work together to join your habitats up. Thank you.

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Verging towards urban rewilding

Could Sloap have its day at last, as a vehicle for nature-friendly untended spaces?



Will Wiles

The last time I was here, I was talking about neglect. Specifically, I was talking about the paradox of urban decay: a certain low level of abandonment and neglect can be a healthy part of the urban ecology, but it would be insane to encourage it as a policy. Neglect has stayed on my mind, although with the warmer weather it has moved outdoors.

In fact I've been playing a new game – 'Underfunding or Rewilding?'. About half the lawn area of our local inner-city park was spared the mower's blades this spring. It quickly developed into knee-high growth, thick with daisies, clover, dandelions and cow parsley. I'm all for it. Even in this tiny patch, it seems to have boosted the local population of butterflies and songbirds. The children love it too; although they appreciate open areas in which to run about, kids also like patches of jungle that can be waded into and explored.

So let's play ... Underfunding, or Rewilding? Is this an expedient measure by a cashstrapped council, or a deliberate effort to boost biodiversity? Or a bit of both? Moving to a smaller example: the square metre of dirt at the base of all the newly planted street trees on our estate. These too have been unmolested so far this year, and have exploded into kneehigh thickets of wild grass and thistles. Indeed it's fascinating how many species can be packed into 1m², without the slightest human encouragement. This one looks like neglect,

One unloved feature of modernism may at last come into its own: the dreaded Sloap but still it's hard to feel churlish about it.

What difference does $1m^2$ around a sapling make, we might ask? Not a lot, on its own. But it adds up – or rather, when every last square metre is strimmed, weedkillered and concreted into neat submission, the subtractions add up. In recent months we have heard a steady drumbeat of dismal news about the state of the natural world: insect populations collapsing, a million species threatened with extinction, ecosystems contaminated with trash down to the deepest ocean trench.

Radical measures will be needed to address this decline in the ecological mechanisms that support all life, and there are already proposals to rewild huge swaths of the country and better regulate agriculture. But to focus on the wildernesses and countryside is to ignore the contribution that cities, towns and individual buildings can make. This will necessitate something of a sea change in construction and maintenance thinking, which at the moment regards anything other than human inhabitation to be deeply undesirable.

I used to think that way. Some years ago, Prince Charles complained that modern buildings, designed without eaves, denied birds places to nest. At the time I thought this remark the height of frivolity – today I must concede that he may have had a point. However, one unloved feature of modernism may at last come into its own: the dreaded Sloap.

Sloap is one of neologisms created by Hubert de Cronin Hastings when editor of the Architectural Review in the 1950s and '60s, as the magazine tried to generate a vocabulary to describe the landscapes of postwar planning. Some of its coinages, such as Subtopia, have usefully entered the language of architecture. Others, such as Semidetsia - tracts of semi-detached housing - have not. Sloap stands for 'space left over after planning'. It refers to the unlovely grass verges and dead zones of dry turf that fill in the gaps of estates laid out as circulation diagrams first and places second. No ball was ever kicked there, no hoverfly ever hovered. Sloap is high-maintenance and low-value. But perhaps it could be Sloap's chance to shine, if it could be sympathetically seeded and left to its own devices. The rewilded verge is not zero-maintenance, but perhaps we could learn to love a little beeloud untidiness. To invert Betjeman's lament for Subtopia: 'Swarm over, life'. •

Will Wiles is an author. Read him here every other month and online at ribaj.com

MISSING THE POINT

The High Line park in New York is a sort of monument to spontaneous rewilding: an effort to preserve a taste of the overgrown mystery of the derelict rail line it replaced. Now its architect, Diller Scofidio and Renfro, is behind what a developer is calling a 'London High Line', on the Greenwich peninsula. But this isn't the creative reuse of redundant infrastructure, it's a wholly new building with a few trees hoicked up above street level. It has about as much in common with parkland as patio heaters have with sunshine.

This is about more than creating diverse practices; the RIBA is working on all fronts to transform our profession



Ben Derbyshire

We must do more to diversify our profession – to deliver a more creative process and better outcomes for our clients. I know this from personal experience – my practice was winner of AJ's Employer of the Year, commended for our understanding that when people from all backgrounds participate it creates a rewarding environment in which to work.

Transforming the profession is much more difficult than diversifying the workforce of a single practice (even one like mine, founded 50 years ago by an all-male partnership). We need to develop behaviours which are inclusive, not exclusive, adopt policies which create equal opportunities out of circumstances which are not and, most importantly in my view, work consciously to banish unconscious bias, which is perhaps the most pernicious obstacle to achieving diversity.

At the RIBA we are guided by our expert advisory group on equality and diversity, 'Architects for Change', chaired by Femi Oresanya. Your next president, Alan Jones, working with RIBA trustee Yemi Aladerun, has also developed recommendations on social inclusion. Together, these contributions have been combined into an overarching

Transforming the profession is much more difficult than diversifying the workforce of a single practice

policy which has been approved by Council and now shapes our work.

Starting with a clear understanding of the data on equality, diversity and inclusion, the programme will concentrate on enhancing existing policies and developing new ones targeting the pinch points that constrain progress. We will be working in partnership with other expert organisations, including the Stephen Lawrence Trust, with whom the RIBA has a long-standing close relationship. Our CEO Alan Valance – like me, a Stephen Lawrence ambassador – is on the Creative Industries Council with whom we are collaborating to increase diversity across the whole creative sector.

We have strengthened our policies to ensure RIBA chartered practices provide non-discriminatory, inclusive and flexible working environments – upheld by the RIBA's newly updated Code of Practice. We have a popular nationwide mentoring programme, mental wellbeing resources in collaboration with the Architects Benevolent Society (now chaired by my predecessor Jane Duncan who has an OBE for services to diversity) and initiatives in place to reduce the gender pay gap – I encourage all practices to publish their own pay gap figures and access and apply the RIBA's useful gender pay gap guidance.

In terms of education, our outreach work has connected 17,000 young people from across the UK with over 340 architects, inspiring them to take an interest in architecture. Parents as well as children involved in this growing programme will increase the pool of understanding about the career opportunities among diverse communities. We have instigated an apprenticeship qualification for both parts 1 and 2 and anticipate that the growth of this and other earn-asyou-learn schemes will improve access to the profession from social groups who previously may have felt deterred. Alongside all of that, our group of vice presidents for student and associate members, Abi Patel, Selasi Setufe and Simeon Shtebunaev, have founded the Future Architects Network, which I am sure will be a stimulus for change for many years to come.

The RIBA is committed to driving change in our profession, working with you to ensure it reflects the society we serve.

@ben_derbyshire
president@riba.org

ARCHITECTS ADDED TO THE SHORTAGE OCCUPATION LIST

The Migration Advisory
Committee — which advises
the UK government on
immigration policy — has
recommended that
architects be included on
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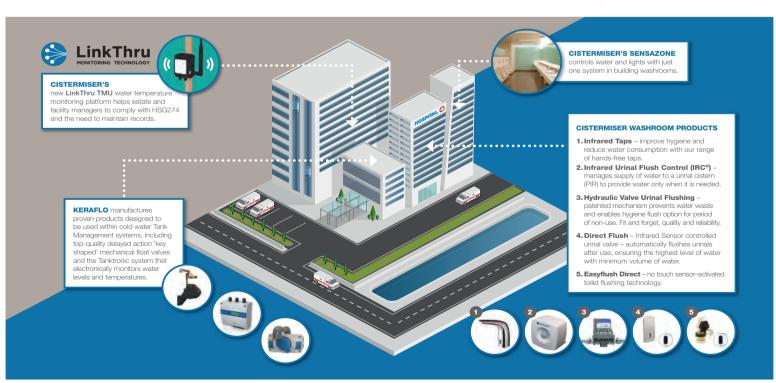




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17 Stirlings' declaration is just the start

The 17 Stirlings' Architects Declare initiative is gaining ground, but where are the rest of you?

Hugh Pearman

When I wrote in my last editorial column about the environment and climate emergency – officially declared by Parliament on 1 May – I said: 'If ever there was a time for architects to step forward and change things for the better, permanently, it is now. This is the challenge that the whole profession needs to get behind. Not at some undefined point in the future. Now. But how?'

That went online on 21 May, and events quickly overtook it in the best possible way. At the time of writing I didn't know that a bunch of very influential architects – all 17 surviving UK Stirling Prize winning practices – were already on the case, had agreed on a joint course of action, and were about to make a decisive move. That move took place on May 29 and is called 'Architects Declare'.

You will, I hope, know all about it already. We covered it online on the morning of the launch. Fully supported by the RIBA and now shadowed by a student/academic equivalent, its impact was immediate and is growing. The '17 Stirlings' as they are now known, signed a joint declaration saying: 'The twin crises of climate breakdown and biodiversity loss are the most serious issue of our time. Buildings and construction play a major part, accounting for nearly 40% of energy-related carbon dioxide emissions while also having a significant impact on our natural habitats.

'For everyone working in the construction industry, meeting the needs of our

Today there are 442 signatures. But there are some 3,760 RIBA chartered practices plus others outside the RIBA. What's keeping the others?

society without breaching the earth's ecological boundaries will demand a paradigm shift in our behaviour. Together with our clients, we will need to commission and design buildings, cities and infrastructures as indivisible components of a larger, constantly regenerating and self-sustaining system.

'The research and technology exist for us to begin that transformation now, but what has been lacking is collective will. Recognising this, we are committing to strengthen our working practices to create architecture and urbanism that has a more positive impact on the world around us.'

They then outlined 11 action points as means towards this end, and invited every UK practice to join them. You can do this through a dedicated website, architectsdeclare.com. As I write on 18 June, there are 442 signatures including the original 17, some famous names and rising-star firms. That's good, but bear in mind that there are some 3,760 RIBA chartered practices plus firms of architects outside the RIBA umbrella. You have to wonder: what's keeping the others?

This caused a big stir on social media, reactions ranging from the inevitable 'virtue-signalling' sneers and finger-pointing at signatories with some distinctly unsustainable buildings to their name, to outright congratulations. Overall, there is a sense of relief that something is being done: the challenge now, of course, is to back up the words with the actions outlined. The Stirling Prize is now much more than just an award for excellence. It has become a force for beneficial change. I know of no other award scheme in any field that has taken on a life of its own like this.

Nobody is saying this is going to be easy. Architecture and building have long timescales, and some signatories have projects in the pipeline dating from years back. These pre-declaration buildings will continue to emerge for some time, some doubtless leading to further finger-pointing. Apart from the obvious need to get clients, contractors and fellow professionals on side - do you reject a commission if they don't share your approach? - there are also ticklish issues of 'value engineering' and architects having to hand their designs to others for the delivery phase. You can be as fervent as you like with sustainable designs, but that avails you nothing if those taking over don't give a hoot. So we all hope that Architects Declare will be the necessary stimulus to change the weather. •

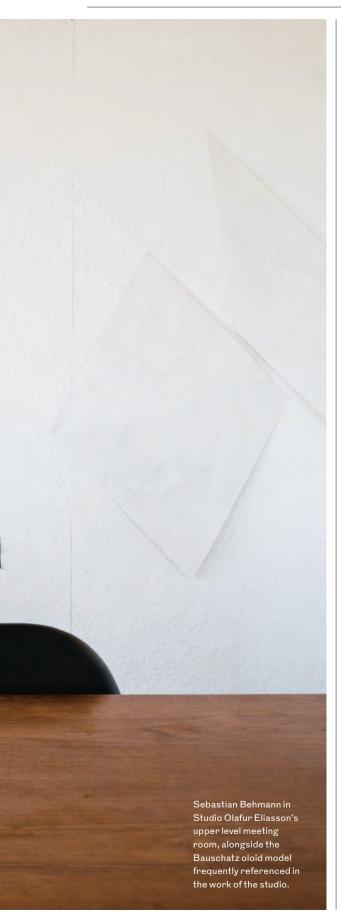
PRACTITIONERS:

architectsdeclare.com

STUDENTS/ACADEMICS:

architectureeducationdeclares.com





Fascinated since childhood by repairing and making things work, Sebastian Behmann was the obvious architect to help Olafur Eliasson make increasingly ambitious art works

Words: Jan-Carlos Kucharek Portrait: Thomas Meyer

Eliasson's can-do man

To pass through an innocuous white door in Berlin architect Sebastian Behmann's apartment, is to enter a kind of wonderland. Here you'll find rooms containing waxing spheres of mirror coated glass set in spirals emulating phases of the moon, colour-drenched glass panels fixed in dark corners that reflect your body in chromatic shards, Fibonacci wire frame hanging from the ceiling, or a dandelion flower of lights set behind large Fresnel lenses – waiting to boot up and emanate like a heavenly Death Star.

Of course, this is no ordinary flat; it connects directly to the ground floor of Danish/ Icelandic artist Olafur Eliasson's 120-strong Berlin atelier. And Behmann is no ordinary architect but Eliasson's studio head of design, helping realise his artworks, which, over the last 20 years of their collaboration, have grown increasingly ambitious in scale and complexity. In 2014, this leap in scale was finally acknowledged when the pair set up Studio Other Spaces (SOS) – a discrete unit where architects work in the artist's 30-strong team in an osmotic way, sliding into the art side and back again. Behmann and his team act as in-

termediary between the artistic concept and the real world in Eliasson's atelier, managing the fabricators and specialist contractors that the art's shift in scale demands.

Behmann, a softly-spoken, silver-haired but youthful 49, in jeans and trainers, takes me on a tour of the studio, and moving through the warehouse's three floors, the atmosphere feels relaxed but focused; pockets of palpable concentration dotting the space's dimensions. It's to be expected – 'In Real Life', Eliasson's solo show at Tate Modern, is about to open, and I imagine that the propped-up, pastel-coloured canvases of painted circles, whose blurred edges hum in the basement studio's electric light, are destined for the Tate's walls.

The sizeable studio is a hot-bed of experimentation, where ideas are visualised, prototyped and then realised to create Eliasson's work – whose artistic power lies in the demand for the viewer's active involvement. Most are acquainted with his 2003 'Weather Project'; the strange, reflected half-sun that drew two million people to the Tate's Turbine Hall to bathe hypnotised under its dull

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sodium light; and perhaps know the 52m diameter walkable cylinder of chromatic glass, 'Your Rainbow Panorama', crowning Aarhus' Kunstmuseum since 2011. Fewer will know of his four waterfalls cascading into New York's East river, or 'Ice Watch', Arctic icebergs that melted before your eyes in European cities.

Behmann, involved in the logistics of realising all of these, heads the team tasked with creating permanent built works - bringing the artist's vision into the realm of architecture. Aside from the completed Fjordenhus office for Kirk Kapital in Vejle, Denmark, a form of brick towers sliced through with parabolas floating in the city's harbour, 'Common Sky' is in construction at New York's Albright-Knox Art Gallery, a beguiling light canopy springing from a single trunk of structure to span a 1960s Gordon Bunshaft courtyard. And due to open in 2021 in Paris is a two-floor permanent public artwork on the Morland Mixité Capitale building, both reflective and transparent, that will create kaleidoscopic effects of the city's skyline and change with the weather.

With challenges such as this, how did Behmann arrive at his role? Self-effacingly, he says he was in he right place. In the early 90s artists flooded in to revive the cultural life of the newly restored capital. 'Galleries sprang up everywhere,' he recalls, 'A huge transformation was taking place and everyone wanted to be part of it.'

Behmann studied architecture in Dresden in the former DDR, feeling that 'you understand urban change better when you are part of the process rather than just observing.' Here he built on his talent of 'making things and improvising and repairing rather than buying new. There was different mentality in the former east as they'd always had less technical means and certainly less money,' he explains, comparing the west's proprietary, off-theshelf construction systems with the improvised, low-tech solutions of the east. 'I thought about this in an old Baltic Sea hotel reception in the former DDR recently, comparing the original and new handrails and thinking how simple and good-looking the old were.'

This fascination with 'make do' was the making of Behmann. After Dresden he set up an office in Berlin doing small jobs and competitions, but it was by helping local artists realise larger installations that he started making a reputation. In 1994 Eliasson, seeking help to realise larger artworks, was introduced to Behmann by artist Thomas



(NDERS SUNE BERG (2)



Top Interior of the Fjordenhus office, where a lack of horizontal surfaces evokes the sense of being on a boat. **Above** Circles in plan and carve outs in section create the complex form floating just off the shoreline.

Demand.' I wasn't the only architect doing this kind of work,' Behmann recalls, 'but over professional ambitions, I had intellectual ones. I complemented Eliasson, I think – our interests were quite aligned.'

I ask what thinking unites Behmann and Eliasson now, from artwork to architecture. It seems the wish to make the most of a little runs through SOS's design output, according with Behmann's earlier preoccupations. He brings out his 'favourite model', a delicate Bauschatz geometry in brass and wire. 'It's an Oloid. It looks complex but it's basically two intersecting part-circles and a shape we work with a lot here. Depending how you look at it, it goes from spherical to pyramidal,' he explains, moving it round. It inspired

the studio's 2011 proposal for an extension to Hans Sharoun's Berlin Philharmonie which, with a road running around two sides, would have allowed the flip-form to manifest. But in a world where you can draw and technically build almost anything, says Behmann, it's also representative of the office's thinking. 'It looks complex but on the model all the wires are straight, which makes it easy to build. We are interested in simple forms that do fascinating things.' So despite complex renderings on the design floor, Behmann says it's quite the opposite. 'We aren't doing Gehrylike geometries. I don't like over-engineered things. We want people to have a sense of the construction, so they can interact with it.'

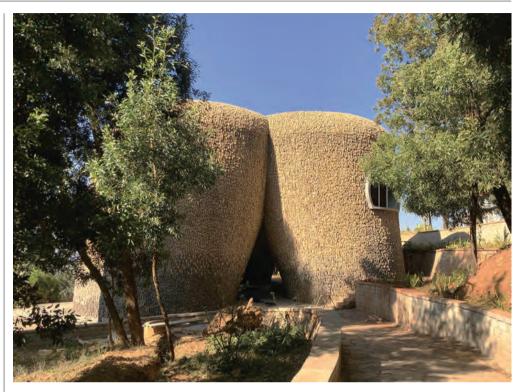
That thinking was also behind the 2011 collaboration with Henning Larsen on Harpa Reykjavik Concert Hall, an all-space filling hexagonal volumetric form, repeated at telephone booth size across a whole facade. 'We thought, as Buckminster Fuller might have done, "What if we invented a different kind of form and adopted it, what would the evolution be?" Constructed and warrantied in the end by a Chinese fabricator, the facade design and detailing stayed firmly with the studio, which worked with a specialist engineer to 'deliver it on an artistic level. If contractors are actively involved in the design they will always default to what we have now,' Behmann adds. The need to keep experimenting with the form - 'the result was spectacular' - was critical. 'The ambition is to do things not yet estab-

'We are interested in simple forms that do fascinating things'

lished as system in the built environment, to experiment. Not to do something "better" per se but to open up a different possibility.'

The same goes for the Fjordenhus project. 'At first it looks very complex, but it's a couple of geometric operations and the rest is a consequence of that,' he says of the circular plans from which ellipses are carved. 'You have to experience the space to fully understand it – it feels like being on a boat. Olafur says it's because it seems there's barely a straight surface that allows you to calibrate your body relative to it.' But it too is born of simplicity. 'There's no curvature in the facade. Everything is straight lines – it's brick after all. Almost everything in this studio has a sense of a direct crossover from high-tech to low-tech.'

Perhaps this low tech aspect is best exemplified in Addis Ababa's Meles Zenawi Memorial Park, completing this summer, which SOS was invited to work on. The design for the park centres on the modern history of Ethiopia; walking through you encounter five buildings; a conference centre, library, guest house for researchers, exhibition space and offices. Rather than use traditional adobe the firm looked to colonial Italian modernism with a twist. Local stone cavity walls are formwork for concrete - brightly coloured as in the domestic vernacular. An exterior spiral ramp references the traditional porch, 'the in-between space where people do business. It was important for us to use forms that



would have meaning for people visiting and using the park, looking to the past and future and responding to the city's equatorial, high-altitude climatic conditions,' says Behmann. The emphasis was for the buildings to actively involve users, something the architect sees as one of the core ideas of Eliasson's work. 'What's left out is the thing the viewer brings – that you need to be part of the artwork and co-produce it.'

Yet, in the public realm scheme for US basketball team the Golden State Warriors, he only hints at what the project is about, citing previous work with Japanese architect Toyo Ito as inspiration. 'We're building approximations of a form in stainless steel and pumping

them up using water pressure. We've created 5m diameter spheres using this technique,' he enthuses. It's clear this experimentation is what makes Behmann get up in the morning: 'I've always felt this is the best place I could work – a rich garden of possibilities. It excites me that things we develop could only be done in the context of an artist's studio.'

With a strange tower visualisation on one of the studio walls, it's clear that the sky's the limit for SOS and its artistic challenging of the built environment's conventions - and it looks like Behmann plans to continue the investigation with Eliasson. 'The built world is a construct, man-made, not God-given. The ground condition of SOS' thinking as a practice is that we've the power and means to change anything; in moving from art into architecture, this remains our prime motivation.' Yet while speaking with optimism of the possibility this presents society with, there's an ominous edge to Behmann's artistic truths in uncertain times: 'What if Buckminster Fuller had been more successful?' he wonders. Sometimes the smallest detail can make the world tip in a whole other direction.'



Top The Meles Zenawi Memorial Park Research Centre, Addis Ababa, in the terraced landscape of the park. **Left** A mock-up of the kaleidoscope installation for the Morland Mixité Capitale project installed on the studio's roof.

ribaj.com

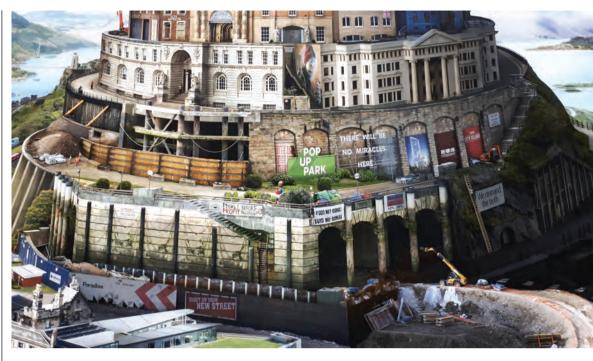
Climate change takes the floor

High tech, low tech – routes to sustainability compete for attention at the Royal Academy Summer Show

Hugh Pearman

The Royal Academy Summer Show has been a fixture of The Season since 1769. Yes, a quarter of a millennium. This is the selling art exhibition where anyone can send one or two works in for a modest fee and if they are lucky, get them selected by a panel of RAs who are also entitled to enter up to half a dozen of their own works. Since the RA includes architects as well as artists of all varieties, and there is a dedicated Architecture Room selected by a different architect RA each year, it's quite the event for a profession which likes to rub shoulders with artists - as Soane RA did with Turner RA - and even sometimes pretend it's a bit of an artist itself (spoiler: it isn't, see also Venice Biennale, get a grip).

Anyway, art critics often like to sneer at the summer show but the RA doesn't care because this cluttered garage sale of a show keeps the cash tills ringing and the Academy - specifically, its art schools where the fortunate few chosen students pay nothing - afloat. It receives no state funding, remember. Visitors flock to it and all that ticketing and those spin-off purchases plus the commission on sales made by the artists (30% plus VAT) swell the Burlington House coffers. And besides, I think it's rather glorious in its ramshackle way. I even bought something from the show this year. But not the Banksy in the first gallery (immigrant rat forcing the padlock on a roller-shuttered EU



entrance portal from Heathrow) which is not for sale and might be a bit pricey if it was.

This year's architecture room is curated and designed by Spencer de Grey RA of Foster and Partners. And it is a very designed space. My first reaction on approaching it was - oh no, he's done that thing of over-stuffing it, way too much crammed in, he needs to edit it down. But then after living with the space for a while and seeing how people use it - I was there on a teeming Friends day - I came to appreciate the design intent. The room is a miniature city, complete with mini central plaza - it even has a couple of real silver birch trees in it. Drawings and movies are pushed to the perimeter walls and stacked up high, almost to the cornice, as is the Summer Show way. The rest of the room is given over to models, displayed on two-tier plinths. It is all very hugger-mugger, almost casbah-like, and the fact that there are pinch points in the circulation, planned or not, gives a sense that something important is happening as people pause and knot on their canter through the galleries. You have to slow down here.

And something important IS happening. De Grey has made this Sustainability Year in the architecture room, as befits someone from the squad of 17 Stirling Prize winners who a week earlier had jointly launched the 'Architects Declare' initiative against climate change and species extinction (see page 65). Everyone included was asked to take a 'holistic view' of the projects they submitted,

Above The UK isolated and divided - detail of Babel Britain by Emily Allchurch in Gallery VII.

The room is a miniature city, complete with mini central plaza — it even has a couple of real silver birch trees in it

particularly considering the embodied energy of the materials and construction processes used. In consequence there are a lot of projects in timber and other crop materials including thatch, some using recycled products, some re-using existing buildings, most with light energy-in-use footprints.

The responses vary, of course, from the vernacular (BDP contributed a single thatched panel of the kind its engineers designed with Architype for the University of East Anglia's Enterprise Centre) to the high-tech (Grimshaw's use of photovoltaic shading canopies and water-capturing condensers for its 2020 Dubai Sustainability pavilion for 2020). Somewhere between these extremes comes Lord Foster, who has contributed a nice little model of his project to reinvigorate London Zoo's listed Snowdon Aviary - by Cedric Price, Frank Newby and Lord Snowdon - as a Colobus monkey habitat. His additional building there will have a structure of laminated bamboo.

While Alison Brooks' Exeter College Cohen Quad building in Oxford manages 20% better than building regs, energy-wise, one does wonder slightly at the message given out by some of the megaprojects here, especially the towers (even though there is a model of a projected all-CLT tower in the Hague by PLP). A low-rise green and watery new city such as de Grey's own Amaravata masterplan in India is more like it. More like it still is Peter Barber Architects' charming small glazed ceramic concept model of an ultra-dense Thames Estuary settlement which

Energy-wise, one does wonder slightly at the message given out by some of the megaprojects here, especially the towers







Left Card tube model of Thomas Heatherwick's Zeitz MOCAA gallery in Cape Town — carved out of grain silos.

proposes using clay dredged from the bottom of the river as a building material.

Then there is Eleanor Derbyshire's Passive Winery project, present here in a sectional model, rather differently sustainable to Katie Cunningham's nuclear submarine reactor removal building, which is conceived as a public promenade in which the sub in question is dramatically held vertically. Finally, the matter of the ocean's plastic waste emergency is tackled by small's beach model of a shelter made from salvaged plastic bottles: waste as building material.

As Thomas Heatherwick observes of his converted grain-silos art gallery in Cape Town, Zeitz MOCAA, 'The single most sustainable thing is to reuse rather than demolish a building.' His large cardboard-tube model of his cutaway design approach there has quite some visual impact.

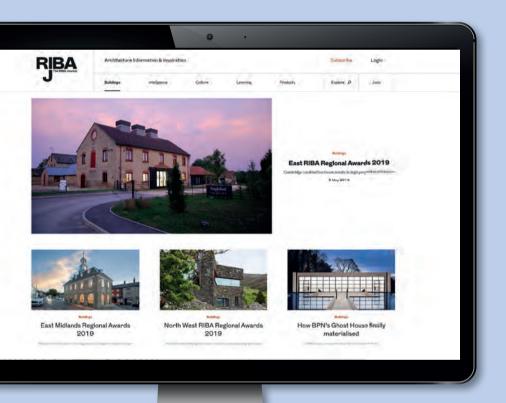
Outside the architecture room, Gallery VII, curated by Anne Desmet and Barbara Rae, is dominated by the back-illuminated 'Babel Britain (after Verhaecht)' by Emily Allchurch. The famous Tower of Babel image is transformed into a collage of an isolated, divided island and we know what that's all about.

It's good to come across excellent work by the veterans too. Peter Cook RA's latest colourful drawings have taken on something of the character of batik while Ted Cullinan RA includes a wonderfully Ted-like drawing 'Straight from the wood' of people congenially living and making buildings in a forest. Which is where we all started and, for all I know, may soon return.

Royal Academy of Arts Summer Exhibition, 10 June -12 August. Burlington House, Piccadilly, London W1J OBD

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Obituary 73

I M Pei 1917 – 2019

Renowned architect of the Louvre pyramid and Museum of Islamic Art in Doha, taught by Gropius and Breuer, and whose first commission was the Mile High Center in Denver

MORLEYVONSTERNBERG



I M Pei, who has died aged 102, brought clarity and quality to his buildings. They are beautifully designed in every detail and usually very well made, of good materials. To Europeans he was best known for his glass-pyramid design for the Louvre in Paris (1983-93) – the central and three smaller satellite

pyramids daylighting the subterranean circulation area that completely freed up access to the various wings of the museum while providing the visitor facilities that a modern museum needs. This seemed like a culmination of his career – he was in his late 70s, and officially retired from practice, by the time it opened – but Pei just carried on, with such later works as his acclaimed Museum of Islamic Art in Doha, Qatar, completed in 2008.

Pei's fame by then was such that – having been tempted out of retirement – he could reject all suggested sites for the museum and instead insist it was built on a new artificial peninsula at the southern end of Doha Bay. He travelled the Islamic world for six months while developing his design, Islamic motifs proving very congenial to an architect with such a love for pure geometry. He emerged again to receive the RIBA Royal Gold Medal for Architecture in 2010, having previously won every other significant award including in 1983 the Pritzker Prize.

The eponymous company he founded in 1955 became Pei Cobb Freed in 1989 as the founder handed over to others. PCF contributed commercial buildings to London's Canary Wharf district but the only pure Pei building in the UK came later, and in an unexpected place: the 2003 Oare Pavilion, in the grounds of Oare House in Wiltshire. It is a large summer house, right on axis in the avenue of trees leading down from the house. Again highly

geometric and symmetrical, it is a true modern folly with a touch of the pagoda about it. His clients, Henry and Tessa Keswick, saw this as their personal Millennium project and – the Keswick family being noted Far East taipans – hired the world's best known Hong Kong/Chinese architect. Drawings and other materials for this project are in the RIBA collections.

Born in Guangzhou and brought up in Hong Kong and Shanghai, Pei travelled to the United States in 1935 to study architecture, and never returned to live in his home country. He graduated from the Massachusetts Institute of Technology, and received a Masters degree from Harvard Graduate School of Design, where he studied under Gropius and Breuer. His first commission was for the noted planner-developer William Zeckendorf: the Miesian Mile High Center in Denver. His best known other buildings are the Mesa Laboratory of the National Center for Atmospheric Research Boulder, Colorado (1961-67), the East Wing of the National Gallery Washington DC (1968-78), the John F Kennedy Library, Boston (1965-79), the Bank of China, Hong Kong (1982-89), the Miho Museum in Shiga, Japan (1991-97) and in Luxembourg the Grand Duke Jean Museum of Modern Art (2006).

Norman Foster has paid tribute to Pei, saying: 'For me, he was an inspiration and a true master of monumental modernism... sensitive to tradition and the value of the vernacular. He drew on concepts developed by Chinese landscape architecture, reflecting a deep appreciation of the importance of the spaces between buildings. The integration of nature and landscape into his designs is a theme that runs through much of his work right to the Miho Museum in Japan which was literally built into the landscape.'

RIBA president Ben Derbyshire added: 'It is a rarity for one architect to have such a vast portfolio of exceptional international work...(he) practised a humane modernism that touched generations of architects and will continue to do so.'

Hugh Pearman

IN MEMORIAM

John Charles William Fulbeck

ELECTED 1953 CHELMSFORD

Edgar Thomas Cale

ELECTED 1962 CAMBRIDGESHIRE

David Charles Parry

ELECTED 1971 SOMERSET

Richard Ernest Nugent

ELECTED 1976 WEST MIDLANDS

Charles Michael Walker

ELECTED 1974 HAMPSHIRE

John Arthur Wells-Thorpe

ELECTED 1954 BRIGHTON

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



Exchange

Emergency means emergency

Re your column on the climate emergency (p103, June 2019), I hope your question will resonate with people. Most of us are probably trying to do the best we can despite the actions and arguments of governments that seem to have been overrun by market fundamentalism.

There has been a huge increase in public awareness of the environmental emergency over the last six months or so, thanks to the urgent demands of the youngsters who are not yet handcuffed to the old economy. The tipping point to a renewable energy economy (when it will be much easier for us to be more effective) may not be that far off, but there are plenty of perceived and often imaginary obstacles so that radical change is still not coming soon enough to prevent massive environmental damage.

Let's imagine a leap forward to 2120, and imagine the question being asked: 'Why didn't people as late as 2020 act with greater urgency to avoid the climate chaos?' We would be rightly condemned for our excuses, selfishness and complacency.

This is an emergency and must be treated like an emergency by the government and by us. Short term payback is a non-starter, so the Green Deal was doomed from the start. We need people to be less greedy about short term profits, and invest for the very long term. Now we are so late in starting this work, there must be massive pay-outs for deep-retrofitting 15,000 homes a week across the UK. Each retrofitted home will need to have a 'charge' put on it, with a gradual payback over 100-200 years for whoever lives in the home. This will provide a 'win' for people today and a 'win' for people in the future. Surely this is a no-brainer?

Marian Parket and Aller an

We welcome letters but retain the right to edit them: letters.ribaj@riba.org RIBAJ, RIBA Enterprises, 66 Portland Place, London W1B 1AD Many young people are angry and have the energy to carry out the needed work. We need to provide the opportunities for them to do so. We must all become activists for change.

Justin Bere, Bere Architects, London

Let's build on Passivhaus

On reading the president's article on post occupancy evaluation in the May issue (p54), regarding how to improve building performance: quite frankly the Germans got there before us and have been doing this since about 1998. Not only did they come up with the concept, designed by scientists and not building professionals, but they put it into practice. Nothing was left to guesswork and hunches, but all worked out scientifically and to be affordable, such that the energy savings recoup the capital costs within 10-20 years. Then they had the guts to go back and measure the results of the energy saving to check if their theories were right - and there you have the POE.

Their findings showed not only that their system worked, but also that the residents and other end users were happy. While their systems met their targets, measurements also showed that other low energy buildings missed their design specification by up to 50%.

The system? Passivhaus of course. Even if the RIBA and the British building industry does not want to go down this route, it seems sensible to build on the research that has already been done.

And what did they discover to be one of the most important elements of obtaining the design criteria? Real on-site quality control of the installation of materials and all the building elements.

Liam Kellehar, Cordoba, Spain

Nothing was too much for Tim Vaulkhard

Further to your obituary of Tim Vaulkhard (June issue, p111): Tim was a wonderful colleague, hugely collaborative, enlightened and committed to the craft of architecture and we enjoyed working with him greatly.

No late night airport pick up or drop off, long four-wheel drive journey or persuasive conversation on site was too much for Tim.

John McAslan, executive chairman, John McAslan + Partners, London

CORRECTIONS: RIBA REGIONAL AWARDS

In the last issue we misattributed the Merano Residences in Lambeth (p78). The correct attribution is Rogers Stirk Harbour + Partners with EPR Architects. And we mislocated a town: Taunton is in Somerset, not Devon (UKHO HO, p14)

Something to get off your chest? Write to us: letters.ribaj@riba.org







Follow us on Twitter @RIBAJ Find us on Facebook & Instagram Stand tall. Talent should be recognised. Put yourself forward or nominate your colleagues and collaborators now.

RIBAJ, in association with Origin, is on the hunt for construction's Rising Stars, those reaching for the sky in architecture and the built environment.

RISING STARS 2019: ENTER NOW

Do you think strategically, push materials to the limits and design better ways of working and building? If so, we want to hear from you.

Last year our stellar judges identified nine of the most talented, socially aware, promising practitioners of the rising generation to join the third cohort of RIBAJ Rising Stars. They are social warriors, layering extra curricula activities on top of practice – from building apps to becoming a mindfulness practitioner or finding situation-changing solutions to homelessness.

Thousands of architects, clients and influencers have seen the Rising Stars' stories here in RIBA Journal, on ribaj.com and through our social media channels, giving the talents of those Rising Stars a boost for the coming years. This year it could be you or someone you work with.

Deadline: 23.59 Monday 9 September 2019

Winners will be profiled in the RIBA Journal and on ribaj.com, and invited to an exclusive Class of 2019 party and round table.





Enter at ribaj.com/enter-rising-stars





Future Town Centres





ACO's business is deeply involved in place making. The management of water protects the places where we live and work while helping to create solutions that enhance biodiversity and improve ecology in those environments. Town centres are a crucial aspect of community and place making so it follows that they need to be sustainable in all senses of the word.

Passionate about designing solutions for management of water from roads, squares, buildings and green spaces, ACO recognises that while rejuvenating our town centres is a challenge it is also huge opportunity to rethink the way we build and use 'place'. This mind-set led ACO to initiate the Future Town Centres competition, one that would engage some of the best problem solvers in the country — architects.

The competition supports sustainability, exceptional design and a flair for innovation, and has begun a conversation with architects at the centre of it. It has provided a prominent platform to share ideas and a voice to lead the way in transforming and revitalising these spaces and the buildings within them.

To find out more visit aco.co.uk/FutureTowns





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JUDGING PANEL

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John Prevc

Regional leader urban design, HOK

Gary Wilburn

Managing director, HPW Architects

DOVER EVENT

Roger Walton

Strategic director (operations and commercial), Dover District Council

James Galpin

Partner, Hazle McCormack Young Architects

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Assistant edtior, RIBAJ (chair)

BYKER EVENT

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Architectural services manager, Blaenau Gwent County Borough Council

Carolyn Merrifield

President, RSAW and partner, Downs Merrifield Architects

Eleanor Young

Executive editor, RIBAJ (chair)

FUTURE TOWN CENTRES

Once there was more to town centres than merely shops. This ideas competition asked entrants to find ways of recreating the hum of the high street in three very different towns

Without big retail brands, what is a town centre? It is a question playing out across the country as the retailers' exodus from the high street continues. Over the past century or more, town centres have come to rely on retail for vibrancy and economic activity. But in many cases, shops have provided a veneer of success to places that have seen connections, character and community fractured by successive waves of policy and development. Look closely and you'll see the evidence: roads that divide or pass around the centre, heritage or natural assets that are underused or neglected and uninviting pedestrian routes.

This Future Town Centres competition, organised by RIBAJ in collaboration with ACO, looks beyond the retail monoculture to the broader placemaking that urban centres need to remedy these fractures, refocus shopping streets and instil optimism and opportunity for the future. Architects were invited to look at ways of reinvigorating areas of three very different UK towns, selected for their varied challenges and

Dover The entrants and judges inside the Maison Dieu where the Dover event took place.





Byker
The Byker event took place just down the valley at
Ouseburn Farm, shown here with the presenters
and judges.

because their councils are actively looking for ideas. In coastal Dover, the task was to revive mid-town, an area that is predominantly in public ownership and includes the historic Maison Dieu building. In Byker, Newcastle, the competition brief called for ideas to boost a traditional linear centre, the Shields Road. In Tredegar, South Wales, the focus was on the centre of the market town, which has a proud heritage as the birthplace of the politician Aneurin Bevan and of the National Health Service.

The competition attracted almost 80 entries and three were shortlisted for each location. Finalists included a mix of local and national names. The teams presented their designs to panels which included local representatives at each location, and three winners were chosen. In their appraisal, the judges looked for placemaking designs

that were not only imaginative but also considered environmental factors, health and wellbeing, economic and social value and future resilience. They sought designs that would create a desirable destination, capable of attracting visitors, residents and financial investment.

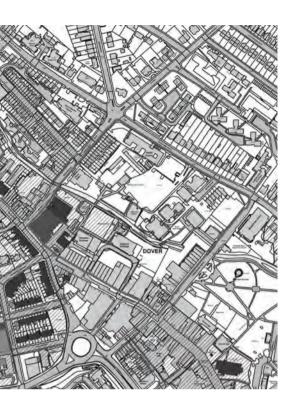
For inspiration the nine shortlisted practices delved into history, to times when industry, education, health, housing and other essentials of community sat happily together in the heart of the town. While the competition brief offered potential for radical and playful responses, the final designs are largely pragmatic and implementable in a phased approach. They recognise the challenges of funding and delivery in these times of austerity.

The competition was intended purely to explore ideas, but all the local authority representatives on the panels found inspiration in the finalists' work. The dialogue between architects and local authorities looks set to continue.

Tredegar

From left: judges Malcolm Cross and Eleanor Young with the Tredegar winning team from Rural Office for Architecture.





Left

The mid-town focus of the competition.

Right

Periscope's masterplan showing proposed zoning of the town.



Main challenges

- → Channel ferry visitors pass by but don't stop
- → Disconnected from sea and castle
- → Development has been ad hoc, largely disregarding the river

D0VER

Millions pass through the ferry port every year. What would it take to entice them to linger in the town?

'There are moments of grand magnificence to the town. It's a matter of looking at how you can stitch them all together and build on the culturally rich assets that are already there'

Kirsty Badenoch, Periscope

Dover has a lot going for it. It has a major tourist attraction in the castle above the town as well as heritage buildings like the medieval Maison Dieu, now the town hall. Over 10 million people use its ferry port every year, but few ever think of stopping for a stroll and a coffee in the town centre.

The subject of this part of the competition was rejuvenation of the mid-town, the 5.9 hectare most northerly block of central Dover that houses the council offices, town hall, police station, health centres, a largely redundant telephone exchange and a college. Through the middle runs the River Dour, a potential asset but also a flood risk in this valley town.

The brief asked architects to revitalise the centre, giving it a more compact and less linear form, as well as make positive use of the river. Entrants were able to think beyond the mid-town to how it would connect with the wider area, to the castle's elevated location, Pencester Gardens, a park to the south, and the A20 dual carriageway to the Port of Dover, which forms a barrier between town and sea.

Judging took place in the Maison Dieu, where Dover District Council's Roger Walton outlined concerns: 'We don't have the problems of access that other towns have, but we do have the dual carriageway.' All the entries advocated a more varied housing and business offer, public realm improvements and a riverside walk. But Periscope won because its concept captured the essence of the place and used the topography. 'It creates a joyful place,' summed up judge Gary Wilburn.



Above

The proposal suggests creating new cycle and pedestrian routes and new cultural spots, including a small gallery.

Winner Periscope

Acupuncture is the word that best sums up the method behind Periscope's winning entry. In developing its approach to respectfully adding buildings, uses, walking and cycling routes and public spaces, the architect looked at the high street over time, to understand how typical uses have changed. This showed that the high street used to be an important public space for experiencing theatre, artistic expression and community events, as well as trading.

Periscope's proposal creates spaces for such activities while considering resilience, connectivity, localness and sustainability. Compared with the other Dover entries, this scheme put the environment high on the agenda, encompassing urban ecology, a renewable energy strategy and a

network of green streets within a compact urban grain.

The River Dour is transformed into an ecological river park with walking and cycling routes and footbridges. The bluegreen corridor provides flood attenuation as well as potential for leisure uses. It is one of three routes or ribbons leading towards the sea, with the others running alongside commercial buildings and homes. The flow of vehicles around mid-town is altered to give pedestrian priority on key routes and create a shared surface on the high street (Biggin Street). The landscape is continued from Dover station to Pencester Gardens and eastward to Dover Castle, making the town easier for visitors to navigate.

Small urban squares and pocket parks are added at key points: the station,

Below

Periscope's submission turns the river into a point of interest, leisure and means of supporting biodiversity as well as flood prevention.

mid-town arrival point and a new town hall square. New anchor buildings around the town hall draw people to it, while a series of publicly focused 'attractor' buildings introduce moments of activity in key places. These include a community art gallery, small business hub in the telephone exchange, and the town hall reimagined as a civic centre and venue for public events.

Periscope addresses the issue of housing with small apartment blocks on the park edge along the river. The judges saw the potential for this area, currently associated with lower value housing, to become desirable. They also praised the design's focus on the river. 'Putting the river at the heart is fantastic for the town, nature and people's health and wellbeing,' said judge Sue Morgan. And the acupuncture approach meant it could all be done gradually. 'Even a mobility hub could begin with vehicle charging points and scale up,' said Periscope's Kirsty Badenoch.



Dover

Shortlisted Purcell

Opening the presentation on behalf of this heritage-renowned practice, architect Louise Priestman said that for Dover 'It's not just about heritage buildings; it's about people and place.' And so, to inform its design, the team scoured the town, gleaning opinions from locals, shoppers, day trippers, even the volunteers at a social hub for older people. The conversations identified a strong affinity for place but, incidentally, a lack of awareness of heritage assets, and concerns about vehicle pollution.

As a result, one of the first aims of Purcell's proposal was to improve wayfinding and make transport greener. It suggested an eco-bus to take people around the town centre and to the marina, introduced semi-pedestrianised zones, a river walk to



Above

The proposal relocates existing community uses and creates housing.

'The engagement with the community was positive'

Gary Wilburn, judge

connect heritage assets and a new 'edible' bridge, planted with fruit and vegetables, over the A20 road.

The second focus was on mid-town itself and the large-scale overhaul of the river to create a large plaza, conceived as a gathering space with a series of grand boulevards radiating from it, one of which would improve sightlines from the town hall to the castle. The scheme relocated retail south to create a more compact high street and introduced a culinary school and almshouses — available at a peppercorn rent — to encourage younger people to stay.

While the panel appreciated the bold moves of the design, the scale of the plaza gave rise to concerns. 'Will there be enough organic footfall?' asked judge James Galpin.

Shortlisted RX Architects

'This uses the river in a business sense'

John Prevc, judge

Dover owes its existence to the River Dour, but over time it has been partly culverted, fenced off and forgotten. 'The culture of the river has always been there, but there's a need to reinforce what's there, and make it more civic,' explained Derek Rankin of RX Architects. Removing barriers and revitalising the river is the core of its proposal.

It creates a blue-green corridor with planting and water pools that not only

addresses flood risk but provides pleasant spaces for community uses such as vegetable gardens or petanque pistes. Traditional riverside industry, such as a brewery, is reinstated. Apartment buildings with cafés and bars at ground level would help create a neighbourhood that could attract young professionals. Community facilities are centralised, with the technical college repositioned in a new building facing the river. Existing buildings are reconfigured, including the telephone exchange, which becomes a small business hub.

With the introduction of conservation courses, students at the technical college could even become standard bearers for ecological management of the river.

'This proposal really celebrates the water,' said Galpin. That creative use of the river and reuse of buildings made this entry a strong contender.



Left

RX Architect's proposal considers the beauty and utility of the chalk river, making it a leisure space but also creating businesses that draw on it.



Shortlisted Shaw Studio

'High street biophilia is much needed there'

John Prevc, judge

'Byker has a strong community and already has food-related initiatives going on,' said Shaw Studio's David Shaw. With that in mind, the team's entry turns Shields Road into a hub of food-centred activity.

The proposal's main ingredient is an urban farm next to Morrisons, served with small scale interventions on the high street. The farm, with modular timber greenhouses, is a source of fresh, cheap fruit and vegetables, as well as an education and mentoring centre for schools and businesses. The high street would be owned by the local community via a high street land trust (HSLT), an adaptation of the community land trust model. It would collect 25% of business rates from retailers to help support new green infrastructure and food projects.

High street traffic would be reduced to a one-way single lane for buses and deliveries. Planters reduce traffic flow and there is sheltered space to sit and eat, hold a cooking demonstration, grow flowers or sell fruit and vegetables. The high ambition, HSLT concept, modular timber approach and street greening appealed to the judges.

Below

The high street would become a version of a community land trust.





Ahove

Shields Road in the 1950s when it was a busy commercial centre.

BYKER

Bookies and charity shops yes, but also enviable amenities. How to shake off the 'UK's worst high street' tag?

The Shields Road in Byker, Newcastle, has achieved national notoriety over the years. An analysis by retail property consultancy Harper Dennis Hobbs has ranked it the UK's worst high street for the past two years. The street, which is adjacent to Byker Wall, is mainly a neighbourhood shopping area. 'Like other areas across the country it has retail challenges,' Newcastle City Council's Richard Charge said at the judging day in nearby Ouseburn. It has a store vacancy rate of 16%, but some of its occupied units reflect deprivation: bookmakers, takeaways and charity shops.

Yet the area has amenities other locations might envy, including a Morrisons supermarket, post office, banks, library, swimming pool and independent traders. Its pub, the High Main, attracts people from the city centre at weekends.

Main challenges

- → Image problem
- → The environment is uninviting and there is little
- → The high street is in a deprived neighbourhood

The street is also very accessible by public transport, although a motorway bypass and metro line block pedestrian access for Byker Wall's community. A metro station is located to the south and there are buses every three minutes, though this does mean the road is clogged with double deckers. Easy parking and diverse shops make this a popular spot for drivers to pick up last-minute purchases.

The architecture is varied and largely robust. Some finer buildings recall the street's heyday when it had two department stores, Parrish's and Beavans. But along and behind Shields Road where terraces have been removed, there are blank gables, expanses of paving and small car parking courts. Environmental quality is poor, with untidy buildings and a proliferation of bollards and railings.

These factors inspired very different responses from the entrants who embraced housing, health, growing, making, food, and even a festival. But the winner xsite is based within walking distance of Shields Road and brought local insight and passion to its proposal.

Future Town Centres Byker

Winner

xsite architecture

'They addressed the problem of the traffic on Shields Road and were very in touch with how the community engages, and how it relies on the high street'

Amanda Kahn, judge

Local firm xsite began its proposal by announcing that contrary to reports it doesn't believe the Shields Road is broken. Rather, the fact that it does not attract big retail names means its smaller businesses survive and its economy has found an equilibrium.

However, because the high street does not support the kind of property dealing and rising values that might be achievable elsewhere, large-scale change is not viable. The team's winning proposal therefore took the view that architecture alone would not solve the subtler issues. Instead it proposed a scheme that concentrated on smaller interventions in the built fabric along with a social programme to improve perception and feel.

One of the primary moves was the reintroduction of a community festival to give the road a new USP. The street's diverse food stores would provide the foundation for educational and 'grow your own' initiatives. New markets, start-up business space and community outlets would provide forums for talking, making and skills gathering, putting empty business premises to good use. Health and wellbeing would be promoted by the food and educational initiatives as well as activities — the street could provide a series of walking routes and host a Sunday park run or even a city games event.

Otherwise, rerouting buses, removing bollards and barriers and introducing greenery would give Shields Road an

Right

The wellbeing initiatives xsite is proposing for Byker.

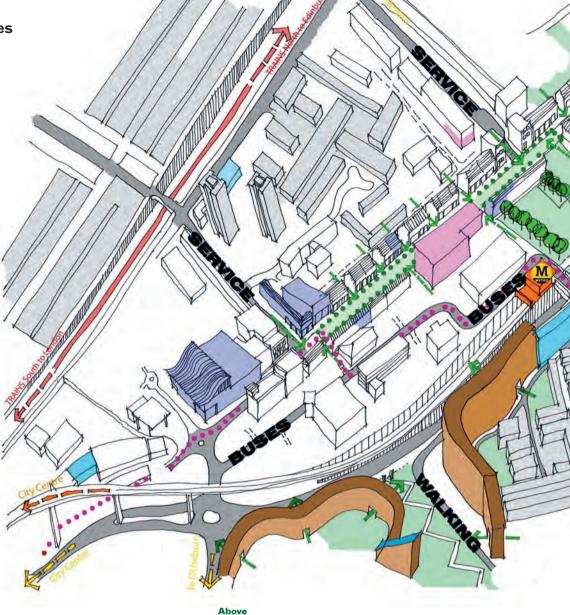
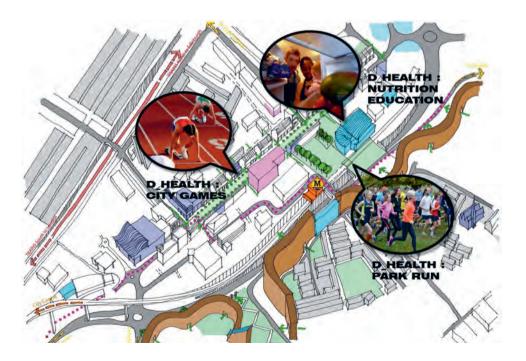


Diagram to show how xsite proposes to improve routes and links through the area including creation of a pedestrianised high street.





altogether friendlier face. Open space and sustainability would be enhanced as local people would be able to grow fruit and vegetables. Blank terrace gable ends would be enlivened with the help of local artists and in the longer term equipped with a shallow shop concept designed to provide small sales outlets for micro-businesses. Space would be made to provide opportunities for people to sit and talk on the street, which would help provide the natural surveillance that has been lacking.

Overall, the judges felt that xsite's community focus stood out, particularly its realism towards implementation and how the area's food diversity could be turned to advantage. At the moment, people go to the city's west end for Asian foods, but a festival here could enhance identity and footfall.

'Here's a programme to help people come together,' said John Prevc, an opinion Amanda Kahn echoed: 'You can see the community's gradual journey.'

Shortlisted

MawsonKerr

'Byker has a heritage of shipbuilding, and could tap into that manufacturing history through the creation of a makerspace'

Will Mawson, Mawson Kerr



MawsonKerr chose not to deal with Shields Road directly but to focus on the spaces behind it — expanses of car parking and empty plots. 'Our analysis highlighted the barriers in connections to Byker. These feel like no-go areas at night,' said the practice's Daniel Dyer.

The team found that much of the housing close to Shields Road was demolished ahead of Byker Wall's development, moving people further from the high street. Its approach had three key themes: reinhabit, lifestyle and adapt.

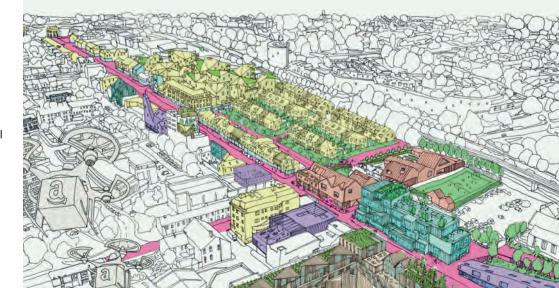
On the backland sites it reintroduced homes and density, proposing to convert empty spaces above shops to homes to increase retail demand and footfall. Uses on the high street are diversified, with former retail units accommodating start-ups or small-scale factories. 'Byker has such a heritage of shipbuilding that there is an opportunity to tap into that making,' explained Will Mawson.

Shields Road itself is reimagined as a linear town square with shared surfaces, where cars travel slowly and bicycles and pedestrians co-exist. Nature is introduced at street level and on rooftops.

The judges praised Mawson's presentation which adopted the imagery of gardening — planting seeds of culture change and nurturing to enhance the sense of wellbeing. 'It's a journey over 20 years,' said John Prevc.

Below

With ecommerce expected to make up 40% of retail sales by 2030, MawsonKerr populates backland sites with housing to diversify the area and bring footfall.



TREDEGAR

The birthplace of Bevan and the NHS has not fared well in recent history, but there's a will to revive its fortunes



Tredegar has a distinguished heritage but loss of industry and employment have brought decline. Sited on the slopes of the Sirhowy Valley in South Wales, it is the UK's first planned town, created in the early 19th century by Samuel Homfray alongside his Tredegar Iron Company.

It is notable for its street grid and central Circle, and as the birthplace of Aneurin Bevan, the politician who drove the foundation of the NHS, drawing on the model of the Tredegar Workmen's Medical Aid Society. Two buildings in the conservation area, No 10 The Circle and Tredegar General Hospital, are linked to the society.

'It has been a struggle, but we are seeing inward investment and there is a passion within the town to lift the profile of Tredegar,' explained Blaenau Gwent County Borough Council councillor Malcolm Cross during judging in the grade II listed Bedwellty House and Park, Homfray's former home.

While the historic town is centred

around the high street, there is more recent development to the east, west and north, particularly the 1960s shopping centre which largely turns its back on its surroundings. The northern end along Commercial Street has many small shops, some with residential above.

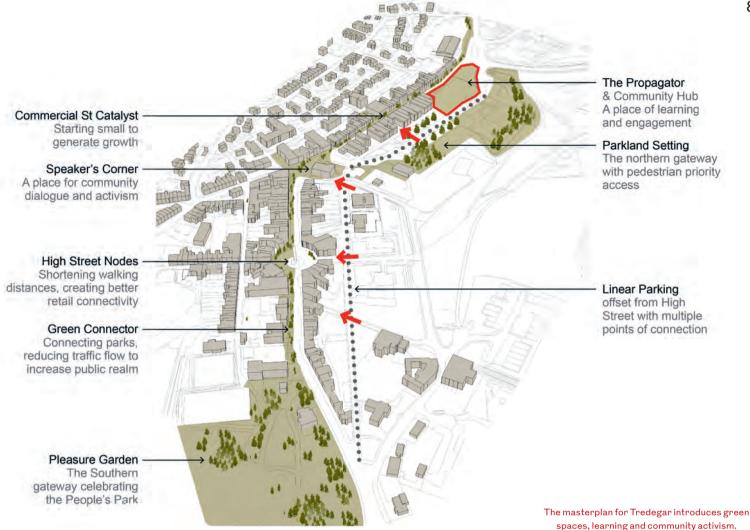
Much of the area's post-war development is low density, monofunctional and car oriented. The A4048 runs north-south through the valley, impeding east-west movement and diverting people and businesses away from the town centre. There is scope for change at the shopping centre and town centre gateways and the three entries focused on these, as well as the enhancement of Tredegar's heritage.

The panel applauded the detail of the submissions, and took some time to reach a consensus. Council representatives questioned how measures would withstand or deter anti-social behaviour and ongoing costs. In the end, Rural Office for Architecture won for its community-focused approach, which offered the potential to transform lives and opportunities alongside streets.

Main challenges:

- → Historic centre needs activity
- → Shopping centre is unattractive and short on retailers
- → Capital and operational investment





Winner

Rural Office for Architecture

The winning proposal from Carmarthen-based Rural Office for Architecture celebrates Tredegan's resilience, supporting community activity and propagating enterprise with a focus on health, wellbeing and inhabitation of the high street.

'Tredegar has a thriving community with a variety of groups and clubs, but that isn't evident from its high street,' explained architect Niall Maxwell. The team's proposal centres around a community hub called the Propagator which is intended to make groups more visible and offer a place where people can learn, make, build and grow.

The scheme knits together the high street using three nodes: the 72ft high Town Clock, the brow of the terrace surrounding Castle Street Church, and the end of Commercial Street. Traffic flow on the high street is reduced, a series of pedestrian green ways added, and existing parkland

'As architects we have a tendency to parachute in with solutions, so the Propagator is a way of giving the community power. We're sowing the seed'

Niall Maxwell, Rural Office for Architecture

connected. Rural Office also included some smaller interventions that could make a difference at relatively low cost, including the reintroduction of shop canopies on the high street to create space where people can linger and chat.

The shopping centre is partially retained as a mixed-use building at a scale more sympathetic to the streetscape. The Propagator becomes a signpost and landmark, intentionally contrasting with the current

architectural language of the town's northern gateway. With its home-grown, people orientated approach, it offers everyone the opportunity to contribute to the site's making and development and becomes the hub for new ideas, growth, sustainable engagement and celebration.

The team impressed the judges by drawing on its work with South Wales communities. Maxwell explained how the proposal could be taken forward. 'There has to be a call to action from a new or existing organisation, with a five-year plan.'

Council judges found the prospect of engaging the community daunting, but also potentially exciting. 'It would be fantastic to engage people,' said Carolyn Merrifield, while Sue Morgan observed: 'The Propagator concept recognises that we can no longer look to public money to generate civic pride.'

Future Town Centres Tredegar



Shortlisted Bruges Tozer Architects

Gateway new buildings and repurposed existing ones, road improvements, markets and night lighting are among the features that stood out in Bruges Tozer's entry.

The re-establishment of Tredegar as a market town is central to its proposition.

The southern end of Commercial Street

'This is about honouring the past of Tredegar and bringing it forward'

Richard Swann, Bruges Tozer

would become a market square, while two landmark buildings — Castle Street Church and the former Queens Ballroom — would be transformed into a covered market and other community uses.

Investment in residential development is proposed to generate employment and increase users, particularly for the evening economy. Housing would be for a mixture of tenures, as well as assisted living and care homes, to substantially broaden the town centre's population.

Drawing on Tredegar's role in the founding of the NHS, the proposal focuses on community health. A new Entrance Square at the northern end, flanked by new landmark buildings, would incorporate wellbeing facilities such as a children's play area, gymnasium or dance floor, fitness centre and youth facilities. Finally, wind-powered kinetic beacons at public nodes would connect key public spaces via a continuous laser beam. The beacons would, said Bruges Tozer's Richard Swann, 'visually reconnect the town and celebrate its history.'

Shortlisted

The Environmental Dimension Partnership

Could Tredegar be home to a fun run called the Bevan Bounder? That was one idea in Environmental Dimension's shortlisted entry. New residential and employment units are designed to attract a diverse resident and worker population. The shopping centre is repurposed as an independent living scheme, with a nursery close by, bringing children and families into the town centre.

The judges appreciated the idea to reprioritise routes through the town, limiting access to green public transport, walking and cycling. Landscape interventions would encourage greater wildlife diversity. Trees and urban planting would also help modulate temperatures, purify air and manage storm water for flood risk.

'This was the most building-focused and ambitious of the three entries,' commented judge Jim Allen. Overall, the design reinstates the public realm as the stage set for urban life, with the mile-long high street proposed for the new run.

'Tredegar's place in the landscape is man made, but there is nature all around it'

Gareth Howell, EDP



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Habitat warehouse and showroom Wallingford, Berkshire, 1971

This warehouse and showroom for Habitat, in Wallingford, Berkshire, was built at a time when both the furniture company and the High Tech style that the building exemplifies were in the ascendant. Known as 'the Jolly Green Giant' in reference to its corrugated green cladding (inspired by founder Terence Conran's green Porsche), the building was designed in 1971 by young architects Ahrends, Burton and Koralek whose stylish and creative approach chimed with Habitat's affordable modern style.

Conran was determined to build something which reflected Habitat's aesthetic, defying calls from others in the company to buy a cheaper, standard unit. The result is a vast green warehouse and a much smaller, adjacent showroom. Also included on the site were a café and this children's playground – featuring galvanised steel service pipe sections sculpted into climbable structures by Eduardo Paolozzi.

The playground is photographed by John Donat, ABK's contemporary from the Architectural Association in the 1950s. The image is typical of Donat's informal, photo-journalistic approach to architectural photography in which he aimed to capture 'an experience of a slice of time in the life of a building'.

Justine Sambrook

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Architectural Acoustic Finishes

Project: Product:

HIDE Restaurant SonaSpray fcx

HIDE is a stunning new Michelin Star restaurant and bar in Piccadilly, London by LustedGreen Architects.

Oscar Acoustics' specialist in-house installation teams applied 20mm of SonaSpray fcx in two bespoke whites to feature curved ceilings on both the ground and first floors. SonaSpray controls reverberation, creating a relaxed and enjoyable atmosphere within a space.

Photo by Andrew Meredith



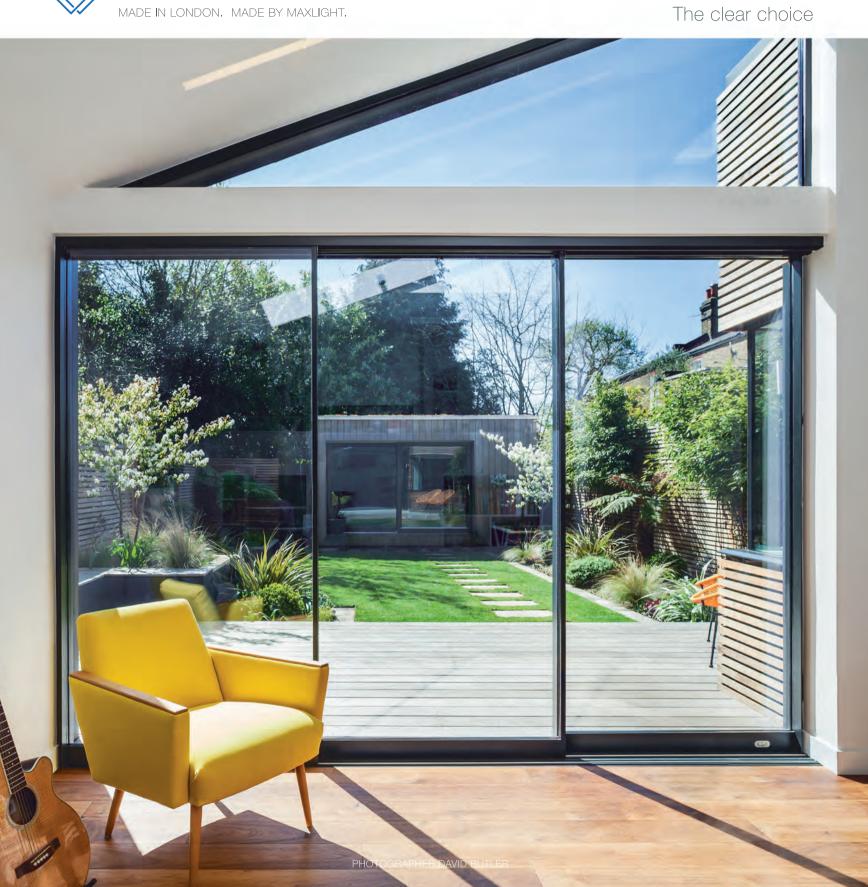








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